



SEQUENCE LISTING

<110> MedImmune Vaccines, Inc.
Cheng, Xing
Park, Hyun J
Jin, Hong

<120> COMPOSITIONS AND METHODS INVOLVING RESPIRATORY SYNCYTIAL VIRUS
SUBGROUP B STRAIN 9320

<130> 7682-135-999

<140> 10/811,508

<141> 2004-03-26

<150> 60/458,331

<151> 2003-03-28

<150> 60/508,320

<151> 2003-10-03

<160> 56

<170> PatentIn version 3.1

<210> 1

<211> 15225

<212> DNA

<213> respiratory syncytial virus B 9320

<400> 1
acgcgaaaaa atgcgtacta caaacttgca cattcgaaaa aaatggggca aataagaatt 60
tgataagtgt tatttaagtc taaccttttc aatcagaaat ggggtgcaat tcattgagca 120
tgataaaggt tagattacaa aattttatttg acaatgacga agtagcattg ttaaaaaataa 180
catgtttatac tgacaaatta attctttctga ccaatgcatt agccaaagca gcaatacata 240
caattaaatt aaacggcata gttttttatac atgtttataac aagcagtga gtgtgccctg 300
ataacaatat tgtagtgaat tctaacttta caacaatgcc aatattacaa aacggaggat 360
acatatggga attgattgag ttgacacact gctctcaatt aaatgggtcta atggatgata 420
attgtgaaat caaatttttct aaaagactaa gtgactcagt aatgactgat tatatgaatc 480
aaatatctga tttacttggg cttgatctca attcatgaat tgtgtttagt ctaattcaat 540
agacatgtgt ttattaccat tttagttaat ataaaaactc atcaaagaga aatggggcaa 600
ataaactcac ctaatcagtc aaatcatgag cactacaaat aacaacacta ctatgcaaa 660
attgatgatc acagacatga gacccctgtc gatggaatca ataataacat ctctcaccaa 720
agaaatcata acacacaaat tcatatactt gataaacaat gaatgtattg taagaaaact 780
tgatgaaaga caagctacat tcacattcct agtcaattat gagatgaagc tactacacaa 840
agtagggagt accaaatata agaaatacac tgaatataat acaaaatatg gcactttccc 900
tatgcctata tttatcaatc atggcggggt tctagaatgt attggcatta agcctacaaa 960
acacactcct ataataataca aatatgacct caaccgtaa attccaacaa aaaactaacc 1020
catccaaact aagctatttc ttaaataaca gtgctcaaca gttaagaagg ggctaattcca 1080
ttttagtaat taaaaataaaa ggtaaagcca ataacataaa ttggggcaaa tacaagatg 1140
gctcttagca aagtcaagtt aaatgataca ttaaataaagg atcagctgct gtcattctagc 1200
aaatacacta ttcaacgtag tacaggagat aatattgaca ctcccaatta tgatgtgcaa 1260
aaacacttaa acaaactatg tggatgcta ttaatcactg aagatgcaaa tcataaattc 1320
acaggattaa taggtatgtt atatgctatg tccaggttag gaagggaaga cactataaag 1380
atacttaaag atgctggata tcatgttaaa gctaattggag tagatataac aacatatcgt 1440
caagatataa atggaaagga aatgaaatcc gaagtattaa cattatcaag cttgacatca 1500
gaaatacaag tcaatattga gatagaatct agaaagtcct acaaaaaaat gctaaaagag 1560
atgggagaag tggctccaga atataggcat gattctccag actgtgggat gataatactg 1620
tgtatagctg cacttgaat aaccaaatta gcagcaggag atagatcagg tcttacagca 1680
gtaattagga gggcaacaa tgtcttaaaa aacgaaataa aacgctacaa gggcctcata 1740
ccaaaggata tagctaacag tttttatgaa gtgtttgaaa aacaccctca tcttatagat 1800

gtttttgtgc	acttttggcat	tgcacaatca	tccacaagag	ggggtagtag	agttgaagga	1860
atctttgcag	gattattttat	gaatgcctat	gggttcagggc	aagtaatgct	aagatgggga	1920
gttttagcca	aatctgtaaa	aaatatcatg	ctaggacatg	ctagtgtcca	ggcagaaatg	1980
gagcaagttg	tggaaagtcta	tgagtatgca	cagaagttgg	gaggagaagc	tggattctac	2040
catatattga	acaatccaaa	agcatcattg	ctgtcattaa	ctcaatttcc	taacttctca	2100
agtgtggtcc	taggcaatgc	agcaggtcta	ggcataatgg	gagagtatag	aggtacacca	2160
agaaaccagg	atcttttatga	tgcagccaaa	gcatatgcag	agcaactcaa	agaaaatgga	2220
gtaataaaact	acagtgtatt	agacttaaca	gcagaagaat	tggaggccat	aaagcatcaa	2280
ctcaacccca	aagaagatga	tgtagagctc	taagttaaca	aaaaatacgg	ggcaaataag	2340
tcaacatgga	gaagtttgca	cctgaatttc	atggagaaga	tgcaaataac	aaagctacca	2400
aattcctaga	atcaataaag	ggcaagttcg	catcatccaa	agatcctaag	aagaaagata	2460
gcataatatc	tgttaactca	atagatatag	aagtaactaa	agagagcccg	ataacatctg	2520
gcaccaacat	caacaatcca	acaagtgaag	ctgacagtac	cccagaagcc	aaaaccaact	2580
acccaagaaa	acccctagta	agcttcaaa	aagatctcac	cccaagtgac	aaccctttt	2640
ctaagttgta	caaagaaaca	atagaaacat	ttgataacaa	tgaagaagaa	tctagtact	2700
catatgaaga	aataaatgat	caaacaaatg	acaacattac	agcaagacta	gatagaattg	2760
atgaaaaaatt	aagtgaata	ttaggaatgc	tccatacatt	agtagttgca	agtgaggac	2820
ccacttcagc	tgcgatgga	ataagagatg	ctatggttgg	tctaagagaa	gaaatgatag	2880
aaaaaataag	agcgggaagca	ttaatgacca	atgatagggt	agaggctatg	gcaagactta	2940
ggaatgagga	aagcgaaaaa	atggcaaaa	acacctcaga	tgaagtgtct	ctcaatccaa	3000
cttccaaaaa	attgagtgc	ttgctggaag	acaacgatag	tgacaatgat	ctatcacttg	3060
atgatttttg	atcagtgatc	aactcactca	gcaatcaaca	acatcaataa	gacagacatc	3120
aatccattga	atcaactgcc	agaccgaaca	aacaaacggt	catcagcaga	accaccaacc	3180
aatcaatcaa	ccaattgatc	aatcagcaac	ctaacaataat	taacaatata	gtaacaaaaa	3240
aagaacaaga	tggggcaaat	atggaaacat	acgtgaacaa	gcttcacgaa	ggctccacat	3300
acacagcagc	tgttcagtac	aatgtttctag	aaaaagatga	tgatcctgca	tactaataca	3360
tatgggtgcc	tatgttccag	tcattctgtgc	cagcagactt	gctcataaaa	gaacttgcaa	3420
gcatcaacat	actagtgaag	cagatctcta	cgcccaaagg	accttcacta	cgagtcacga	3480
tcaactcaag	aagcgctgtg	ctggcacaaa	tgcccagtaa	ttttatcata	agtgcaaatg	3540
tatcattaga	tgaagaagc	aaattagcat	atgatgtaac	tacaccttgt	gaaatcaaa	3600
catgcagtct	aacatgctta	aaagtaaaaa	gtatgctaac	tacagtcaaa	gatcttacca	3660
tgaaaacatt	caacccact	catgagatta	ttgtctatg	tgaatttgaa	aatattatga	3720
catcaaaaag	agtaataata	ccaacctatc	taagatcaat	tagtgtcaaa	aacaaggacc	3780
tgaactcact	agaaaatata	gcaaccaccg	aattcaaaaa	tgctatcacc	aatgcgaaaa	3840
ttattcccta	tgcaggatta	gtattagtta	tcacagttac	tgacaataaa	ggagcattca	3900
aatatatcaa	gccacagagt	caatttatag	tagatcttgg	agcctaccta	gaaaaagaga	3960
gcatatatta	tgtgactaca	aattggaagc	atacagctac	acgtttttca	atcaaaccac	4020
tagaggatta	aacttaatta	tcaacgctaa	atgacaggtc	cacatatatc	ctcaaactac	4080
acactatatc	caaacatcat	gaacatctac	actacacact	tcatacacaca	aaccaatccc	4140
acttaaaatc	caaaatcact	tccagccact	atctgttaga	cctagagtgc	gaataggtaa	4200
ataaaaccaa	aatatggggt	aaatagacat	tagtttagat	tcaatcaatc	tcaacaacca	4260
tttatactgc	taattcata	catatactat	aaatttcaaa	atgggaaata	catccatcac	4320
aatagaattc	actagcaaat	tttggcctta	ttttacacta	atacatatga	tcttaactct	4380
aatctcttta	ctaattataa	tactatttat	gattgcaata	ctaaataagc	taagtgaaca	4440
taaaacattc	tgtaacaaaa	ctcttgaact	aggacagatg	tatcaaatca	acacatagtg	4500
ttctaccatc	atgctgtgtc	aaattataat	cctgtatatg	taaacaaaca	aatccaatct	4560
tctcacagag	tcatggtggc	gcaaagccac	gccaaactatc	atggttagcat	agagtagtta	4620
tttaaaaatt	aacataatga	tgaattatta	gtatgggatc	aaaaacaaca	ttggggcaaa	4680
tgcaaccatg	tccaaacaca	agagtcaacg	cactgcccag	actctagaaa	agacctggga	4740
tactcttaat	catctaattg	taatatcctc	ttgtttatac	agactaaacc	taaaatctat	4800
agcacaaaata	gcactatcag	ttttggcaat	gataatctca	acctctctca	taattgcagc	4860
cataatattc	atcatctctg	ccaatcacaa	agttacacta	acaacggtta	cagttcaaac	4920
aataaaaaaac	cacactgaaa	aaaacatcac	cacctacctt	actcaagtct	caccagaaag	4980
ggtttagctca	tccatacaac	ctacaaccac	atcaccaatc	cacacaaatt	cagctacaat	5040
atcaccaaat	acaaaatcag	aaacacacca	tacaacaaca	caagccaaaa	gcagaatcac	5100
cacttcaaca	cagaccaaca	agccaagcac	aaaatcacgt	tcaaaaaatc	cacaaaaaaa	5160
acaaaaagat	gattaccatt	ttgaagtgtt	caatttttgt	ccctgtagta	tatgtggcaa	5220
caatcaactt	tgcaaatcca	tctgcaaaac	aataccaagc	aacaaaacaa	agaaaaaac	5280
aaccatcaaa	cccacaaaca	aaccaaccgt	caaaaccaca	aacaaaaagag	acccaaaaac	5340
accagccaaa	atgatgaaaa	aagaaaccac	caccaaccac	acaaaaaaac	caaccctcaa	5400
gaccacagaa	ggagacacca	gcacctcaca	atccactgtg	ctcgacacaa	ccacatcaaa	5460

acacacaatc	caacagcaat	ccctccactc	aatcacctcc	gaaaacacac	ccaactccac	5520
acaaatcccc	acagcaaccg	aggcctccac	atcaaattct	acttaaaaaa	cctagtcaca	5580
tgcttagtta	ttcaaaaaact	acatcttagc	agagaaccgt	gatctatcaa	gcaagaatga	5640
aattaaacct	ggggcaaata	accatggagt	tgctgatcca	caggtcaagt	gcaatcttcc	5700
taactcttgc	tattaatgca	ttgtacctca	cctcaagtca	gaacataact	gaggagtttt	5760
accaatcgac	atgtagtgca	gtagcagag	gttatttttag	tgctttaaga	acaggttggt	5820
ataccagtgt	tataacaata	gaattaagta	atataaaaga	aaccaaatgc	aatggaactg	5880
acactaaagt	aaaacttata	aaacaagaat	tagataagta	taagaatgca	gtaacagaat	5940
tacagctact	tacgcaaaac	acgccagctg	ccaacaaccg	ggccagaaga	gaagcaccac	6000
agtacatgaa	ctacacaatc	aataccacta	aaaacctaaa	cgtatcaata	agcaagaaga	6060
ggaaacgaag	atttctggga	ttcttggttag	gtgtaggagc	tgcaatagca	agtggtatag	6120
ctgtatccaa	agttctacac	cttgaaggag	aagtgaacaa	aatcaaaaat	gctttgttgt	6180
ctacaaacaa	agctgtagtc	agtctatcaa	atgggggtcag	tgttttaacc	agcaaagtgt	6240
tagatctcaa	gagttacata	aataaccaat	tattacccat	agtaaatcaa	cagagctgtc	6300
gcattctcaa	cattgaaaca	gttatagaat	tccagcagaa	gaacagcaga	ttgttggaac	6360
tcaccagaga	atttagtgtc	aatgcagggtg	taacaacacc	tttaagcact	tacatgttaa	6420
caaacagtga	gttactatca	ttgatcaatg	atatgcctat	aacaaatgat	cagaaaaaat	6480
taatgtcaag	caatgtccag	atagtaaggc	aacaaagtta	ttctatcatg	tctataataa	6540
aggaagaagt	ccttgcatat	gttgtagagc	tacctatcta	tggtgtaata	gatacacctt	6600
gctggaaatt	acacacatca	cctctatgca	ccaccaacat	caaagaagga	tcaaatattt	6660
gtttaacaag	gactgataga	ggatgggtatt	gtgataatgc	aggatcagta	tccttcttcc	6720
cacaggctga	cacttgcaaa	gtgcagtcga	atcgagtatt	ttgtgacact	atgaacagtt	6780
tgacattacc	aagtgaagtc	agcctttgtg	acactgcact	attcaattcc	aagtagtact	6840
gcaaatcat	gacttcaaaa	acagacataa	gcagctcagt	aattacttct	cttggagcta	6900
tagtgtctatg	ctatggtaaa	actaaatgca	ctgcatccaa	taaaaatcgt	gggattataa	6960
agacatcttct	taatgggtgt	gactatgtgt	caaacaaagg	agtagatact	gtgtcagtggt	7020
gcaacacttt	atactatgta	aacaagctgg	aaggcaaaaa	cctttatgta	aaaggggaac	7080
ctataataaaa	ttactatgat	cctctagtgt	ttccttctga	tgagtttgat	gcatcaatat	7140
ctcaagtcaa	tgaaaaaatc	aatcaaagtt	tagcttttat	acgtagatct	gatgaattac	7200
tacataatgt	aaatactggc	aaatctacta	caaataattat	gataaccaca	atcattatag	7260
taatcattgt	agtattgtta	tcattaatag	ctattggttt	actgttgat	tgcaaagcta	7320
aaaacacacc	agttacacta	agcaaagacc	aactaagtgg	aatcaacaat	attgcattca	7380
gcaaatagac	aaaaaacacc	ttgatcatgt	ttcaacaaca	atctgctgac	caccaatccc	7440
aaatcaactt	aacaacaaat	atttcaacat	catagcacag	gctgaatcat	ttcctcacat	7500
catgctacct	acacaactaa	gctagatcct	taactcatag	ttacataaaa	acctcaagta	7560
tcacaatcaa	acactaaatc	gacacatcat	tcacaaaatt	aacaactggg	gcaaatatgt	7620
cgcgaagaaa	tccttgtaaa	tttgagatta	gagggtcattg	cttgaatggg	agaagatgtc	7680
actacagtca	taattatctt	gaatggcctc	ctcatgcatt	actagtggag	caaaacttca	7740
tgttaaacaa	gatacttaag	tcaatggaca	aaagcataga	cactttgtcg	gaaataagtg	7800
gagctgctga	actggataga	acagaagaat	atgctcttgg	tatagttgga	gtgctagaga	7860
gttcatatagg	atctataaac	aacataacaa	aacctcagc	atgtgttgct	atgagtaaac	7920
ttcttattga	gatcaacagt	gatgacatta	aaaaactgag	agataatgaa	gaaccaatt	7980
cacctaaagt	aagagtgtac	aatactgtta	tatcatacat	tgagagcaat	agaaaaaaca	8040
acaagcaaac	catccatctg	ctcaaaagac	taccagcaga	tgtgctgaag	aagacaataa	8100
agaacacatt	agatatccac	aaaagcataa	ccataagcaa	cccaaaagag	tcaaccgtga	8160
atgatcaaaa	tgaccaaacc	aaaaataatg	atattaccgg	ataaatatcc	ttgtagtata	8220
tcattccatac	tgatttcaag	tgaaagcatg	gttgccacat	tcaatcacaa	aaacatatta	8280
caatttaacc	ataaccattt	ggataaccac	cagtgtttat	taaatcatat	atttgatgaa	8340
atccctgaag	cacctaaaaa	cttattagat	accactcaac	aatttctcca	acatcttaac	8400
ttatatcatc	atatatatat	agtatatata	ttagtgtcat	aatgcttgac	cataacgata	8460
ttaatggaaa	caaccataaa	actatcataa	taagggttatg	ggacaaaatg	gatcccatga	8520
tttcagaatg	ctctgtctaat	gtgtatctaa	ctgatagtta	tctaaaagggt	gttatctctt	8580
acactaactt	taatgcttta	gggagttacc	tttttaacgg	cccttatctt	aaaaatgatt	8640
ctataacaca	aattagtaga	caaagcccac	tactagagca	tatgaatcta	aaaaaactaa	8700
cttattttcca	gtcatttaata	tctagatata	ataaagggtga	actgaaatta	gaagaaccaa	8760
caactaactt	gtcattactt	atgacatata	aaagtatgtc	ctcgtctgaa	caaatttgcta	8820
acgccaactt	acttaaaaaa	ataatacgaa	gagctataga	aataaagtgt	gtaaagggtgt	8880
cagggtgatg	gaataaacta	ggactaaagg	aaaaggacag	agttaagccc	aacaataatt	8940
aaaacaatca	aaactcagtt	cttacaacca	taattaaaga	tgatatactt	tcggctgtgg	9000
tcaaaaacaac	atcatatata	aattcagaca	aaaatcactc	agtgaaccaa	aatatcacta	9060
	actcttgaaa	aaattgatgt	gttcaatgca	acatcctcca	tcatgggttaa	9120

tacactgggtt	caattttatat	acaaaatttaa	ataacatatt	aacacaatat	cgatcaaagt	9180
aggtaaaaaag	tcattgggttt	atattaatag	ataatcaaac	tttaagtggg	tttcaggttta	9240
ttttaaatca	atatgggtgt	attggtttatc	ataaaggact	taaaaaaatc	acaactacta	9300
cttacaatca	atttttgaca	tggaagacac	tcagccttag	cagattaaat	gtttgcttaa	9360
ttacttggat	aagtaattgt	ttaaatacat	taaataaaaag	cttagggctg	agatgtggat	9420
tcaataatgt	tgtgttatca	caattatttc	tttatggaga	ttgtatactg	aaattatttc	9480
ataatgaagg	cttctacata	ataaaagaag	tagagggatt	tattatgtct	ttaattctaa	9540
acataacaga	agaagatcaa	tttaggacac	gattttataa	cagcatgcta	aataacatca	9600
cagatgcagc	tattaaggct	caaaaaaacc	tactatcaag	agtatgtcac	actttattgg	9660
acaagacagt	gtctgataat	atcataaatg	gtaaatggat	aatcctatta	agtaaatttc	9720
ttaaattgat	taagcttgca	ggtgataata	atctcaataa	cttgagttag	ctatattttc	9780
tcttcagaat	ctttggacat	ccaatggtcg	atgaaagaca	agcaatggat	gctgtaagaa	9840
ttactgtaa	tgaactaag	ttctacttat	taagtagtct	aagtacgtta	agaggtgctt	9900
tcattttatag	aatcataaaa	gggtttgtaa	atacctacaa	cagatggccc	actttaagga	9960
atgctattgt	tctacctcta	agatgggtga	actattataa	acttaatact	tatccatctc	10020
tacttgaaat	cacagaaaat	gatttgatta	ttttatcagg	attgaggttc	tatcgtgagt	10080
ttcatctgcc	taaaaaagt	gatcttgaaa	tgataataaa	tgacaaagcc	atttcacctc	10140
caaaagatct	aatatggact	agttttccca	gaaattacat	gccatcacat	atacaaaatt	10200
atatagaaca	tgaaggttg	aagttctctg	aaagcgacag	atcaagaaga	gtactagagt	10260
attacttgag	agataataaa	ttcaatgaat	gcgactcata	caattgtgtg	gtcaatcaaa	10320
gctatctcaa	caactctaac	cacgtgggat	cactaactgg	taaagaaaga	gagctcagtg	10380
taggtagaat	gtttgctatg	caaccaggta	tgtttaggca	aattcaaalc	ttagcagaga	10440
aatgatagc	cgaaaatatt	ttacaattct	tccctgagag	tttgacaaga	tatggtgatc	10500
tagagcttca	aaagatatta	gaattaaaag	caggataaag	caacaaatca	aatcgttata	10560
atgataacta	caacaattat	atcagtaaat	gttctatcat	tacagacctt	agcaaatcca	10620
atcaagcatt	tagatatgaa	acatcatgta	tctgcagtga	tgtattagat	gaactgcatg	10680
gagtacaatc	actgttctct	tggttgcatt	taacaatacc	tcttgtcaca	ataatatgta	10740
catatagaca	tgcacctcct	ttcataaagg	atcatgttgt	taatctgaat	gaagttgatg	10800
aacaaagtgg	attatacaga	tatcatatgg	gtggattatga	gggctgggtg	caaaaactgt	10860
ggaccattga	agctatatca	ttattagatc	taatatccct	caaagggaaa	ttctctatca	10920
cagctctaatt	aaatggtgat	aatcagtcaa	ttgatataag	taaaccagtt	agacttatag	10980
agggtcagac	ccatgctcaa	gcagattatt	tgttagcatt	aaatagcctt	aaattgctat	11040
ataaagagta	tgcaggcata	ggccataaag	tcaagggaaac	agaaacctat	atatcccgag	11100
atatgcaatt	catgagcaaa	acaatccagc	acaatggagt	gtactatcca	gccagtatca	11160
aaaaagtcct	gagagtaggt	ccatggataa	atacaatact	tgatgatttt	aaagttagtt	11220
tagaatctat	aggcagctta	acacaggagt	tagaatacag	aggagaaagc	ttattatgca	11280
gtttaatatt	tagaaacatt	tggttatata	atcaaattgc	tttgcaactc	cgaaatcatg	11340
cattatgtca	caataagcta	tatttagata	tattgaaagt	attaaaacac	ttaaaaactt	11400
tttttaattct	tgatagtatc	gatatggcat	tatcattgta	tatgaatttg	cctatgctgt	11460
ttggtgggtg	tgatcctaatt	ttgttatatc	gaagcttttt	tagaagaact	ccagacttcc	11520
ttacagaagc	tatagatcat	tcagtgtttg	tggttagcta	ttatactggt	cacgatttac	11580
aagataagct	ccaggatctt	ccagatgata	gactgaacaa	attccttgaca	tgtatcatca	11640
catttgataa	aaatcccaat	gccgagtttg	taacattaat	gagggatcca	caggcttttag	11700
ggtctgaaag	gcaagctaaa	attactagt	agattaatag	attagcagta	acggaagtct	11760
taagtatagc	tccaaacaaa	atattttcta	aaagtgcaca	acattatact	accactgaga	11820
ttgatctaaa	tgatattatg	caaaatatag	aaccaactta	ccctcatgga	ttaagagttg	11880
tttatgaaag	tttacctttt	tataaagcag	aaaaaatagt	taatcttata	tcaggaacaa	11940
aatccataac	taatatactt	gaaaaaacat	cagcaataga	tacaactgat	attaataggg	12000
ctactgatat	gatgaggaaa	aatataactt	tacttataag	gatacttcca	ctagattgta	12060
acaaagacaa	aagagagtta	ttaaagtttag	aaaactcttag	tataactgaa	ttaagcaagt	12120
atgtaagaga	aagatcttgg	tcgttatcca	atatagtagg	agtaacatcg	ccaagtatta	12180
tgttcacaa	ggacattaaa	tatacaacta	gcactatagc	cagtgggtata	attatagaaa	12240
aatataatgt	taatagttaa	actcgtgggtg	aaagaggacc	tactaagcca	tggttaggtt	12300
catctacgca	ggagaaaaaa	acaatgccag	tgtataatag	acaagtttta	acaaaaaagc	12360
aaagagacca	aatagattta	ttagcaaaat	tagactgggt	atatgcatcc	atagacaaca	12420
aagatgaatt	catggaagaa	ctgagtactg	gaacacttgg	attgtcatat	gaaaaagcca	12480
aaaaattgtt	tccacaatat	ctaagtgtca	attattttaca	ccgcttaaca	gtcagtagta	12540
ggccatgtga	attccctgca	tcaataccag	cttatagaac	aacaaattat	catttctgata	12600
ctagtcctga	caatcatgta	ttaacagaaa	cttatggaga	tgaagatatc	gacataggtg	12660
ttcaaaaattg	cataagtttt	ggtcttagcc	taatgtcggg	tgtggaacaa	ttcacaaaca	12720
tatgtcctaa	tagaattatt	ctcataccga	agctgaatga	gatacatttg	atgaaacctc	12780

ctatat	ttttac	aggagatg	tt	gatatcat	ca	aattgaag	ca	agtgataca	aa	aacagcaca	12840
tg	ttcctacc	agataaaa	ata	agtttaac	ccc	aatatgt	aga	attattccta	ag	taacaaa	12900
cact	taa	atc	tggatct	cac	atcaact	cta	atttta	aatatt	agtacata	aaa	12960
at	tttcata	aa	tgattat	att	ttaagt	acta	atttag	ctg	g	att	13020
aac	ttatg	aa	agattca	aaaa	ggtatt	ttttg	aaaa	agattg	gggagag	ggg	13080
at	catatg	tt	cattaatt	tg	aatgt	tttct	ttaatg	ctta	taagact	ttat	13140
tt	cataa	agg	ttatgg	taaa	gcaaa	attag	aatgtg	atat	gaacact	tca	13200
gt	gtttt	gga	gttaat	tagac	agtag	ctact	ggaa	atctat	gtctaa	agtt	13260
ag	aaag	tcat	aaaata	cata	gtcaat	caag	acaca	agttt	gcataga	aata	13320
a	tag	tttt	aa	gttg	gtgtt	tt	aaaa	acgcc	ttaata	aatgc	13380
gg	gttg	ttaa	catag	attat	caccca	acac	acatg	aaagc	tatatt	tatct	13440
tag	ttaga	aat	ggggt	tata	aatgt	tagata	aatta	accat	taaaa	ataaaa	13500
a	tgatg	aat	ttacac	atca	aatct	ctttt	atatt	tagtta	taact	tttca	13560
a	tttg	cta	ac	aaa	caaata	aga	attg	cta	attcaga	aat	13620
tata	tacccc	aacccc	agaa	acttt	tagaaa	atatg	tca	att	aattc	ctggt	13680
a	tagta	acaa	accta	aatct	tgtata	agtg	gaaata	accga	atctat	gatg	13740
tct	ccaata	aa	tgcat	att	aaat	ctttcca	ctg	ttacc	ac	gattaa	13800
a	agact	tgt	caatt	tattt	ccaatt	gttg	tgatag	acag	gattat	agat	13860
a	ta	cagca	aaa	atcca	accaa	cttt	acacca	ccact	tcaca	t	13920
a	tag	tgc	atc	acttt	tattg	c	atgctt	cctt	ggcat	catgt	13980
t	tag	ttcc	ac	aggat	gcaag	atcag	tata	g	agtata	t	14040
a	cccc	agttg	tatag	cattc	ataggt	gaag	gagct	ggtaa	cttatt	tatta	14100
t	aga	acttca	tccag	acata	agata	cat	ttt	acaga	agttt	aaa	14160
g	ttt	ac	ctat	tga	attt	cta	agg	ttata	ca	acgggc	14220
a	ttta	accat	tcctg	ctaca	gatg	caacta	ataa	cattca	ttggt	cttat	14280
a	attt	gcaga	ac	ctatt	agc	atctt	tgtct	g	cgatg	ctga	14340
g	gag	taaa	aat	tata	attg	aa	tgga	gta	agc	atg	14400
t	aa	atag	atg	cattt	taatt	gcaaa	atatc	atg	ctca	aga	14460
a	ta	acatt	ac	tata	ttaaaa	acttat	gtgt	gcctag	gtag	caagt	14520
t	tt	act	tagt	cctt	acaata	ggcc	cttcaa	atata	cttcc	tg	14580
a	t	gctaa	aat	gatt	ctttca	aga	actaaaa	at	ttcatt	at	14640
a	aat	ctat	cga	tg	caaat	att	aaa	agcttaa	tac	ctttc	14700
a	agga	attaa	g	actt	ctattg	tcaaa	attga	agag	tgtag	t	14760
a	ttct	atag	c	tgga	cgtaat	gaag	tattca	gcaaa	agct	tataa	14820
a	at	atc	ctaaa	atgg	ctagat	catg	tttt	aa	acttt	agatc	14880
a	ttt	tata	t	gatag	agtcc	acata	tcctt	act	taag	tga	14940
c	caat	gag	ct	caaaa	agctg	attaaa	atta	caggt	ag	tgt	15000
a	acag	taact	t	aaaa	atatca	tt	aaca	agtt	tggt	caaat	15060
t	att	tatag	tt	att	aaaaaa	atg	caaa	actt	tt	caata	15120
t	at	ctat	tttt	ggt	ctta	agg	ggt	t	aaata	aa	15180
t	tt	aca	acac	aac	gag	acat	tag	ttttt	tga	cact	15225

<210> 2
 <211> 139
 <212> PRT
 <213> respiratory syncytial virus B 9320

<400> 2

Met	Gly	Cys	Asn	Ser	Leu	Ser	Met	Ile	Lys	Val	Arg	Leu	Gln	Asn	Leu
1				5					10					15	
Phe	Asp	Asn	Asp	Glu	Val	Ala	Leu	Leu	Lys	Ile	Thr	Cys	Tyr	Thr	Asp
			20						25				30		
Lys	Leu	Ile	Leu	Leu	Thr	Asn	Ala	Leu	Ala	Lys	Ala	Ala	Ile	His	Thr
			35						40				45		
Ile	Lys	Leu	Asn	Gly	Ile	Val	Phe	Ile	His	Val	Ile	Thr	Ser	Ser	Glu
	50					55					60				
Val	Cys	Pro	Asp	Asn	Asn	Ile	Val	Val	Lys	Ser	Asn	Phe	Thr	Thr	Met
65					70				75					80	
Pro	Ile	Leu	Gln	Asn	Gly	Gly	Tyr	Ile	Trp	Glu	Leu	Ile	Glu	Leu	Thr

				85					90					95			
His	Cys	Ser	Gln	Leu	Asn	Gly	Leu	Met	Asp	Asp	Asn	Cys	Glu	Ile	Lys		
			100					105					110				
Phe	Ser	Lys	Arg	Leu	Ser	Asp	Ser	Val	Met	Thr	Asp	Tyr	Met	Asn	Gln		
		115					120					125					
Ile	Ser	Asp	Leu	Leu	Gly	Leu	Asp	Leu	Asn	Ser							
	130					135											

<210> 3
 <211> 124
 <212> PRT
 <213> respiratory syncytial virus B 9320

<400> 3

Met	Ser	Thr	Thr	Asn	Asn	Asn	Thr	Thr	Met	Gln	Arg	Leu	Met	Ile	Thr		
1				5					10					15			
Asp	Met	Arg	Pro	Leu	Ser	Met	Glu	Ser	Ile	Ile	Thr	Ser	Leu	Thr	Lys		
			20					25					30				
Glu	Ile	Ile	Thr	His	Lys	Phe	Ile	Tyr	Leu	Ile	Asn	Asn	Glu	Cys	Ile		
		35					40					45					
Val	Arg	Lys	Leu	Asp	Glu	Arg	Gln	Ala	Thr	Phe	Thr	Phe	Leu	Val	Asn		
	50					55					60						
Tyr	Glu	Met	Lys	Leu	Leu	His	Lys	Val	Gly	Ser	Thr	Lys	Tyr	Lys	Lys		
65				70					75						80		
Tyr	Thr	Glu	Tyr	Asn	Thr	Lys	Tyr	Gly	Thr	Phe	Pro	Met	Pro	Ile	Phe		
				85				90						95			
Ile	Asn	His	Gly	Gly	Phe	Leu	Glu	Cys	Ile	Gly	Ile	Lys	Pro	Thr	Lys		
			100				105						110				
His	Thr	Pro	Ile	Ile	Tyr	Lys	Tyr	Asp	Leu	Asn	Pro						
		115					120										

<210> 4
 <211> 391
 <212> PRT
 <213> respiratory syncytial virus B 9320

<400> 4

Met	Ala	Leu	Ser	Lys	Val	Lys	Leu	Asn	Asp	Thr	Leu	Asn	Lys	Asp	Gln		
1				5					10					15			
Leu	Leu	Ser	Ser	Ser	Lys	Tyr	Thr	Ile	Gln	Arg	Ser	Thr	Gly	Asp	Asn		
			20					25					30				
Ile	Asp	Thr	Pro	Asn	Tyr	Asp	Val	Gln	Lys	His	Leu	Asn	Lys	Leu	Cys		
		35					40					45					
Gly	Met	Leu	Leu	Ile	Thr	Glu	Asp	Ala	Asn	His	Lys	Phe	Thr	Gly	Leu		
	50					55					60						
Ile	Gly	Met	Leu	Tyr	Ala	Met	Ser	Arg	Leu	Gly	Arg	Glu	Asp	Thr	Ile		
65				70					75						80		
Lys	Ile	Leu	Lys	Asp	Ala	Gly	Tyr	His	Val	Lys	Ala	Asn	Gly	Val	Asp		
				85				90						95			
Ile	Thr	Thr	Tyr	Arg	Gln	Asp	Ile	Asn	Gly	Lys	Glu	Met	Lys	Phe	Glu		
			100				105						110				
Val	Leu	Thr	Leu	Ser	Ser	Leu	Thr	Ser	Glu	Ile	Gln	Val	Asn	Ile	Glu		
		115					120					125					
Ile	Glu	Ser	Arg	Lys	Ser	Tyr	Lys	Lys	Met	Leu	Lys	Glu	Met	Gly	Glu		
	130					135					140						
Val	Ala	Pro	Glu	Tyr	Arg	His	Asp	Ser	Pro	Asp	Cys	Gly	Met	Ile	Ile		

145		150		155		160
Leu Cys Ile Ala	Ala Leu Val Ile Thr Lys	Leu Ala Ala Gly Asp Arg				
	165	170			175	
Ser Gly Leu Thr	Ala Val Ile Arg Arg Ala Asn Asn Val	Leu Lys Asn				
	180	185			190	
Glu Ile Lys Arg Tyr Lys Gly	Leu Ile Pro Lys Asp	Ile Ala Asn Ser				
	195	200			205	
Phe Tyr Glu Val Phe Glu Lys His Pro His Leu Ile	Asp Val Phe Val					
	210	215			220	
His Phe Gly Ile Ala Gln Ser Ser Thr Arg Gly Gly Ser Arg Val Glu						
225	230	235			240	
Gly Ile Phe Ala Gly Leu Phe Met Asn Ala Tyr Gly Ser Gly Gln Val						
	245	250			255	
Met Leu Arg Trp Gly Val Leu Ala Lys Ser Val Lys Asn Ile Met Leu						
	260	265			270	
Gly His Ala Ser Val Gln Ala Glu Met Glu Gln Val Val Glu Val Tyr						
	275	280			285	
Glu Tyr Ala Gln Lys Leu Gly Gly Glu Ala Gly Phe Tyr His Ile Leu						
	290	295			300	
Asn Asn Pro Lys Ala Ser Leu Leu Ser Leu Thr Gln Phe Pro Asn Phe						
305	310	315			320	
Ser Ser Val Val Leu Gly Asn Ala Ala Gly Leu Gly Ile Met Gly Glu						
	325	330			335	
Tyr Arg Gly Thr Pro Arg Asn Gln Asp Leu Tyr Asp Ala Ala Lys Ala						
	340	345			350	
Tyr Ala Glu Gln Leu Lys Glu Asn Gly Val Ile Asn Tyr Ser Val Leu						
	355	360			365	
Asp Leu Thr Ala Glu Glu Leu Glu Ala Ile Lys His Gln Leu Asn Pro						
	370	375			380	
Lys Glu Asp Asp Val Glu Leu						
385	390					

<210> 5
 <211> 241
 <212> PRT
 <213> respiratory syncytial virus B 9320

<400> 5

Met Glu Lys Phe Ala Pro Glu Phe His Gly Glu Asp Ala Asn Asn Lys						
1	5	10			15	
Ala Thr Lys Phe Leu Glu Ser Ile Lys Gly Lys Phe Ala Ser Ser Lys						
	20	25			30	
Asp Pro Lys Lys Lys Asp Ser Ile Ile Ser Val Asn Ser Ile Asp Ile						
	35	40			45	
Glu Val Thr Lys Glu Ser Pro Ile Thr Ser Gly Thr Asn Ile Asn Asn						
	50	55			60	
Pro Thr Ser Glu Ala Asp Ser Thr Pro Glu Ala Lys Thr Asn Tyr Pro						
65	70	75			80	
Arg Lys Pro Leu Val Ser Phe Lys Glu Asp Leu Thr Pro Ser Asp Asn						
	85	90			95	
Pro Phe Ser Lys Leu Tyr Lys Glu Thr Ile Glu Thr Phe Asp Asn Asn						
	100	105			110	
Glu Glu Glu Ser Ser Tyr Ser Tyr Glu Glu Ile Asn Asp Gln Thr Asn						
	115	120			125	
Asp Asn Ile Thr Ala Arg Leu Asp Arg Ile Asp Glu Lys Leu Ser Glu						
	130	135			140	
Ile Leu Gly Met Leu His Thr Leu Val Val Ala Ser Ala Gly Pro Thr						
145	150	155			160	
Ser Ala Arg Asp Gly Ile Arg Asp Ala Met Val Gly Leu Arg Glu Glu						

				165					170					175			
Met	Ile	Glu	Lys	Ile	Arg	Ala	Glu	Ala	Leu	Met	Thr	Asn	Asp	Arg	Leu		
			180					185					190				
Glu	Ala	Met	Ala	Arg	Leu	Arg	Asn	Glu	Glu	Ser	Glu	Lys	Met	Ala	Lys		
		195					200					205					
Asp	Thr	Ser	Asp	Glu	Val	Ser	Leu	Asn	Pro	Thr	Ser	Lys	Lys	Leu	Ser		
	210					215					220						
Asp	Leu	Leu	Glu	Asp	Asn	Asp	Ser	Asp	Asn	Asp	Leu	Ser	Leu	Asp	Asp		
225					230					235					240		
Phe																	

<210> 6
 <211> 256
 <212> PRT
 <213> respiratory syncytial virus B 9320

<400> 6

Met	Glu	Thr	Tyr	Val	Asn	Lys	Leu	His	Glu	Gly	Ser	Thr	Tyr	Thr	Ala		
1				5					10					15			
Ala	Val	Gln	Tyr	Asn	Val	Leu	Glu	Lys	Asp	Asp	Asp	Pro	Ala	Ser	Leu		
		20						25					30				
Thr	Ile	Trp	Val	Pro	Met	Phe	Gln	Ser	Ser	Val	Pro	Ala	Asp	Leu	Leu		
		35					40					45					
Ile	Lys	Glu	Leu	Ala	Ser	Ile	Asn	Ile	Leu	Val	Lys	Gln	Ile	Ser	Thr		
	50					55					60						
Pro	Lys	Gly	Pro	Ser	Leu	Arg	Val	Thr	Ile	Asn	Ser	Arg	Ser	Ala	Val		
65					70					75					80		
Leu	Ala	Gln	Met	Pro	Ser	Asn	Phe	Ile	Ile	Ser	Ala	Asn	Val	Ser	Leu		
				85					90					95			
Asp	Glu	Arg	Ser	Lys	Leu	Ala	Tyr	Asp	Val	Thr	Thr	Pro	Cys	Glu	Ile		
			100					105					110				
Lys	Ala	Cys	Ser	Leu	Thr	Cys	Leu	Lys	Val	Lys	Ser	Met	Leu	Thr	Thr		
		115					120					125					
Val	Lys	Asp	Leu	Thr	Met	Lys	Thr	Phe	Asn	Pro	Thr	His	Glu	Ile	Ile		
	130					135						140					
Ala	Leu	Cys	Glu	Phe	Glu	Asn	Ile	Met	Thr	Ser	Lys	Arg	Val	Ile	Ile		
145					150					155					160		
Pro	Thr	Tyr	Leu	Arg	Ser	Ile	Ser	Val	Lys	Asn	Lys	Asp	Leu	Asn	Ser		
				165					170					175			
Leu	Glu	Asn	Ile	Ala	Thr	Thr	Glu	Phe	Lys	Asn	Ala	Ile	Thr	Asn	Ala		
			180					185						190			
Lys	Ile	Ile	Pro	Tyr	Ala	Gly	Leu	Val	Leu	Val	Ile	Thr	Val	Thr	Asp		
		195					200					205					
Asn	Lys	Gly	Ala	Phe	Lys	Tyr	Ile	Lys	Pro	Gln	Ser	Gln	Phe	Ile	Val		
	210				215						220						
Asp	Leu	Gly	Ala	Tyr	Leu	Glu	Lys	Glu	Ser	Ile	Tyr	Tyr	Val	Thr	Thr		
225					230					235					240		
Asn	Trp	Lys	His	Thr	Ala	Thr	Arg	Phe	Ser	Ile	Lys	Pro	Leu	Glu	Asp		
				245					250						255		

<210> 7
 <211> 65
 <212> PRT
 <213> respiratory syncytial virus B 9320

<400> 7

Met	Gly	Asn	Thr	Ser	Ile	Thr	Ile	Glu	Phe	Thr	Ser	Lys	Phe	Trp	Pro		
1				5				10						15			

Tyr Phe Thr Leu Ile His Met Ile Leu Thr Leu Ile Ser Leu Leu Ile
 20 25 30
 Ile Ile Thr Ile Met Ile Ala Ile Leu Asn Lys Leu Ser Glu His Lys
 35 40 45
 Thr Phe Cys Asn Lys Thr Leu Glu Leu Gly Gln Met Tyr Gln Ile Asn
 50 55 60
 Thr
 65

<210> 8
 <211> 574
 <212> PRT
 <213> respiratory syncytial virus B 9320

<400> 8

Met Glu Leu Leu Ile His Arg Ser Ser Ala Ile Phe Leu Thr Leu Ala
 1 5 10 15
 Ile Asn Ala Leu Tyr Leu Thr Ser Ser Gln Asn Ile Thr Glu Glu Phe
 20 25 30
 Tyr Gln Ser Thr Cys Ser Ala Val Ser Arg Gly Tyr Phe Ser Ala Leu
 35 40 45
 Arg Thr Gly Trp Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile
 50 55 60
 Lys Glu Thr Lys Cys Asn Gly Thr Asp Thr Lys Val Lys Leu Ile Lys
 65 70 75 80
 Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu
 85 90 95
 Thr Gln Asn Thr Pro Ala Ala Asn Asn Arg Ala Arg Arg Glu Ala Pro
 100 105 110
 Gln Tyr Met Asn Tyr Thr Ile Asn Thr Thr Lys Asn Leu Asn Val Ser
 115 120 125
 Ile Ser Lys Lys Arg Lys Arg Arg Phe Leu Gly Phe Leu Leu Gly Val
 130 135 140
 Gly Ser Ala Ile Ala Ser Gly Ile Ala Val Ser Lys Val Leu His Leu
 145 150 155 160
 Glu Gly Glu Val Asn Lys Ile Lys Asn Ala Leu Leu Ser Thr Asn Lys
 165 170 175
 Ala Val Val Ser Leu Ser Asn Gly Val Ser Val Leu Thr Ser Lys Val
 180 185 190
 Leu Asp Leu Lys Ser Tyr Ile Asn Asn Gln Leu Leu Pro Ile Val Asn
 195 200 205
 Gln Gln Ser Cys Arg Ile Ser Asn Ile Glu Thr Val Ile Glu Phe Gln
 210 215 220
 Gln Lys Asn Ser Arg Leu Leu Glu Ile Thr Arg Glu Phe Ser Val Asn
 225 230 235 240
 Ala Gly Val Thr Thr Pro Leu Ser Thr Tyr Met Leu Thr Asn Ser Glu
 245 250 255
 Leu Leu Ser Leu Ile Asn Asp Met Pro Ile Thr Asn Asp Gln Lys Lys
 260 265 270
 Leu Met Ser Ser Asn Val Gln Ile Val Arg Gln Gln Ser Tyr Ser Ile
 275 280 285
 Met Ser Ile Ile Lys Glu Glu Val Leu Ala Tyr Val Val Gln Leu Pro
 290 295 300
 Ile Tyr Gly Val Ile Asp Thr Pro Cys Trp Lys Leu His Thr Ser Pro
 305 310 315 320
 Leu Cys Thr Thr Asn Ile Lys Glu Gly Ser Asn Ile Cys Leu Thr Arg
 325 330 335
 Thr Asp Arg Gly Trp Tyr Cys Asp Asn Ala Gly Ser Val Ser Phe Phe
 340 345 350

Pro	Gln	Ala	Asp	Thr	Cys	Lys	Val	Gln	Ser	Asn	Arg	Val	Phe	Cys	Asp	
		355					360					365				
Thr	Met	Asn	Ser	Leu	Thr	Leu	Pro	Ser	Glu	Val	Ser	Leu	Cys	Asn	Thr	
	370					375					380					
Asp	Ile	Phe	Asn	Ser	Lys	Tyr	Asp	Cys	Lys	Ile	Met	Thr	Ser	Lys	Thr	
385					390					395					400	
Asp	Ile	Ser	Ser	Ser	Val	Ile	Thr	Ser	Leu	Gly	Ala	Ile	Val	Ser	Cys	
				405					410					415		
Tyr	Gly	Lys	Thr	Lys	Cys	Thr	Ala	Ser	Asn	Lys	Asn	Arg	Gly	Ile	Ile	
			420					425					430			
Lys	Thr	Phe	Ser	Asn	Gly	Cys	Asp	Tyr	Val	Ser	Asn	Lys	Gly	Val	Asp	
	435					440						445				
Thr	Val	Ser	Val	Gly	Asn	Thr	Leu	Tyr	Tyr	Val	Asn	Lys	Leu	Glu	Gly	
	450					455					460					
Lys	Asn	Leu	Tyr	Val	Lys	Gly	Glu	Pro	Ile	Ile	Asn	Tyr	Tyr	Asp	Pro	
465					470					475					480	
Leu	Val	Phe	Pro	Ser	Asp	Glu	Phe	Asp	Ala	Ser	Ile	Ser	Gln	Val	Asn	
				485					490					495		
Glu	Lys	Ile	Asn	Gln	Ser	Leu	Ala	Phe	Ile	Arg	Arg	Ser	Asp	Glu	Leu	
			500					505					510			
Leu	His	Asn	Val	Asn	Thr	Gly	Lys	Ser	Thr	Thr	Asn	Ile	Met	Ile	Thr	
	515					520						525				
Thr	Ile	Ile	Ile	Val	Ile	Ile	Val	Val	Leu	Leu	Ser	Leu	Ile	Ala	Ile	
	530					535					540					
Gly	Leu	Leu	Leu	Tyr	Cys	Lys	Ala	Lys	Asn	Thr	Pro	Val	Thr	Leu	Ser	
545					550					555					560	
Lys	Asp	Gln	Leu	Ser	Gly	Ile	Asn	Asn	Ile	Ala	Phe	Ser	Lys			
				565					570							

<210> 9
 <211> 195
 <212> PRT
 <213> respiratory syncytial virus B 9320

<400> 9

Met	Ser	Arg	Arg	Asn	Pro	Cys	Lys	Phe	Glu	Ile	Arg	Gly	His	Cys	Leu	
1				5					10					15		
Asn	Gly	Arg	Arg	Cys	His	Tyr	Ser	His	Asn	Tyr	Phe	Glu	Trp	Pro	Pro	
			20					25					30			
His	Ala	Leu	Val	Arg	Gln	Asn	Phe	Met	Leu	Asn	Lys	Ile	Leu	Lys		
		35				40					45					
Ser	Met	Asp	Lys	Ser	Ile	Asp	Thr	Leu	Ser	Glu	Ile	Ser	Gly	Ala	Ala	
	50					55				60						
Glu	Leu	Asp	Arg	Thr	Glu	Glu	Tyr	Ala	Leu	Gly	Ile	Val	Gly	Val	Leu	
65					70					75					80	
Glu	Ser	Tyr	Ile	Gly	Ser	Ile	Asn	Asn	Ile	Thr	Lys	Gln	Ser	Ala	Cys	
				85					90					95		
Val	Ala	Met	Ser	Lys	Leu	Leu	Ile	Glu	Ile	Asn	Ser	Asp	Asp	Ile	Lys	
			100					105					110			
Lys	Leu	Arg	Asp	Asn	Glu	Glu	Pro	Asn	Ser	Pro	Lys	Ile	Arg	Val	Tyr	
		115					120					125				
Asn	Thr	Val	Ile	Ser	Tyr	Ile	Glu	Ser	Asn	Arg	Lys	Asn	Asn	Lys	Gln	
						135					140					
Thr	Ile	His	Leu	Leu	Lys	Arg	Leu	Pro	Ala	Asp	Val	Leu	Lys	Lys	Thr	
145					150					155					160	
Ile	Lys	Asn	Thr	Leu	Asp	Ile	His	Lys	Ser	Ile	Thr	Ile	Ser	Asn	Pro	
				165					170					175		
Lys	Glu	Ser	Thr	Val	Asn	Asp	Gln	Asn	Asp	Gln	Thr	Lys	Asn	Asn	Asp	
			180					185					190			

Ile Thr Gly
195

<210> 10
<211> 93
<212> PRT
<213> respiratory syncytial virus B 9320
<400> 10

Met	Ile	Lys	Met	Thr	Lys	Pro	Lys	Ile	Met	Ile	Leu	Pro	Asp	Lys	Tyr
1				5					10					15	
Pro	Cys	Ser	Ile	Ser	Ser	Ile	Leu	Ile	Ser	Ser	Glu	Ser	Met	Val	Ala
			20					25					30		
Thr	Phe	Asn	His	Lys	Asn	Ile	Leu	Gln	Phe	Asn	His	Asn	His	Leu	Asp
		35					40					45			
Asn	His	Gln	Cys	Leu	Leu	Asn	His	Ile	Phe	Asp	Glu	Ile	His	Trp	Thr
	50					55					60				
Pro	Lys	Asn	Leu	Leu	Asp	Thr	Thr	Gln	Gln	Phe	Leu	Gln	His	Leu	Asn
65					70					75					80
Ile	Pro	Glu	Asp	Ile	Tyr	Thr	Val	Tyr	Ile	Leu	Val	Ser			
				85					90						

<210> 11
<211> 2166
<212> PRT
<213> respiratory syncytial virus B 9320
<400> 11

Met	Asp	Pro	Ile	Ile	Asn	Gly	Asn	Ser	Ala	Asn	Val	Tyr	Leu	Thr	Asp
1				5					10					15	
Ser	Tyr	Leu	Lys	Gly	Val	Ile	Ser	Phe	Ser	Glu	Cys	Asn	Ala	Leu	Gly
			20					25					30		
Ser	Tyr	Leu	Phe	Asn	Gly	Pro	Tyr	Leu	Lys	Asn	Asp	Tyr	Thr	Asn	Leu
		35					40					45			
Ile	Ser	Arg	Gln	Ser	Pro	Leu	Glu	His	Met	Asn	Leu	Lys	Lys	Leu	
	50					55				60					
Thr	Ile	Thr	Gln	Ser	Leu	Ile	Ser	Arg	Tyr	His	Lys	Gly	Glu	Leu	Lys
65					70					75					80
Leu	Glu	Glu	Pro	Thr	Tyr	Phe	Gln	Ser	Leu	Leu	Met	Thr	Tyr	Lys	Ser
				85					90					95	
Met	Ser	Ser	Ser	Glu	Gln	Ile	Ala	Thr	Thr	Asn	Leu	Leu	Lys	Lys	Ile
			100					105					110		
Ile	Arg	Arg	Ala	Ile	Glu	Ile	Ser	Asp	Val	Lys	Val	Tyr	Ala	Ile	Leu
	115						120					125			
Asn	Lys	Leu	Gly	Leu	Lys	Glu	Lys	Asp	Arg	Val	Lys	Pro	Asn	Asn	Asn
	130					135					140				
Ser	Gly	Asp	Glu	Asn	Ser	Val	Leu	Thr	Thr	Ile	Ile	Lys	Asp	Asp	Ile
145					150					155					160
Leu	Ser	Ala	Val	Glu	Asn	Asn	Gln	Ser	Tyr	Thr	Asn	Ser	Asp	Lys	Asn
				165					170					175	
His	Ser	Val	Asn	Gln	Asn	Ile	Thr	Ile	Lys	Thr	Thr	Leu	Leu	Lys	Lys
			180					185					190		
Leu	Met	Cys	Ser	Met	Gln	His	Pro	Pro	Ser	Trp	Leu	Ile	His	Trp	Phe
		195					200					205			
Asn	Leu	Tyr	Thr	Lys	Leu	Asn	Asn	Ile	Leu	Thr	Gln	Tyr	Arg	Ser	Asn
	210					215					220				

Glu	Val	Lys	Ser	His	Gly	Phe	Ile	Leu	Ile	Asp	Asn	Gln	Thr	Leu	Ser
225					230					235					240
Gly	Phe	Gln	Phe	Ile	Leu	Asn	Gln	Tyr	Gly	Cys	Ile	Val	Tyr	His	Lys
				245					250					255	
Gly	Leu	Lys	Lys	Ile	Thr	Thr	Thr	Thr	Tyr	Asn	Gln	Phe	Leu	Thr	Trp
			260					265					270		
Lys	Asp	Ile	Ser	Leu	Ser	Arg	Leu	Asn	Val	Cys	Leu	Ile	Thr	Trp	Ile
		275					280					285			
Ser	Asn	Cys	Leu	Asn	Thr	Leu	Asn	Lys	Ser	Leu	Gly	Leu	Arg	Cys	Gly
	290					295					300				
Phe	Asn	Asn	Val	Val	Leu	Ser	Gln	Leu	Phe	Leu	Tyr	Gly	Asp	Cys	Ile
305					310					315					320
Leu	Lys	Leu	Phe	His	Asn	Glu	Gly	Phe	Tyr	Ile	Ile	Lys	Glu	Val	Glu
				325					330					335	
Gly	Phe	Ile	Met	Ser	Leu	Ile	Leu	Asn	Ile	Thr	Glu	Glu	Asp	Gln	Phe
			340					345					350		
Arg	Thr	Arg	Phe	Tyr	Asn	Ser	Met	Leu	Asn	Asn	Ile	Thr	Asp	Ala	Ala
		355					360					365			
Ile	Lys	Ala	Gln	Lys	Asn	Leu	Leu	Ser	Arg	Val	Cys	His	Thr	Leu	Leu
	370					375					380				
Asp	Lys	Thr	Val	Ser	Asp	Asn	Ile	Ile	Asn	Gly	Lys	Trp	Ile	Ile	Leu
385					390					395					400
Leu	Ser	Lys	Phe	Leu	Lys	Leu	Ile	Lys	Leu	Ala	Gly	Asp	Asn	Asn	Leu
				405					410					415	
Asn	Asn	Leu	Ser	Glu	Leu	Tyr	Phe	Leu	Phe	Arg	Ile	Phe	Gly	His	Pro
			420					425					430		
Met	Val	Asp	Glu	Arg	Gln	Ala	Met	Asp	Ala	Val	Arg	Ile	Asn	Cys	Asn
		435					440					445			
Glu	Thr	Lys	Phe	Tyr	Leu	Leu	Ser	Ser	Leu	Ser	Thr	Leu	Arg	Gly	Ala
	450					455					460				
Phe	Ile	Tyr	Arg	Ile	Ile	Lys	Gly	Phe	Val	Asn	Thr	Tyr	Asn	Arg	Trp
465					470					475					480
Pro	Thr	Leu	Arg	Asn	Ala	Ile	Val	Leu	Pro	Leu	Arg	Trp	Leu	Asn	Tyr
				485					490					495	
Tyr	Lys	Leu	Asn	Thr	Tyr	Pro	Ser	Leu	Leu	Glu	Ile	Thr	Glu	Asn	Asp
			500					505					510		
Leu	Ile	Ile	Leu	Ser	Gly	Leu	Arg	Phe	Tyr	Arg	Glu	Phe	His	Leu	Pro
		515					520					525			
Lys	Lys	Val	Asp	Leu	Glu	Met	Ile	Ile	Asn	Asp	Lys	Ala	Ile	Ser	Pro
	530					535					540				
Pro	Lys	Asp	Leu	Ile	Trp	Thr	Ser	Phe	Pro	Arg	Asn	Tyr	Met	Pro	Ser
545					550					555					560
His	Ile	Gln	Asn	Tyr	Ile	Glu	His	Glu	Lys	Leu	Lys	Phe	Ser	Glu	Ser
				565					570					575	
Asp	Arg	Ser	Arg	Arg	Val	Leu	Glu	Tyr	Tyr	Leu	Arg	Asp	Asn	Lys	Phe
			580					585					590		
Asn	Glu	Cys	Asp	Leu	Tyr	Asn	Cys	Val	Val	Asn	Gln	Ser	Tyr	Leu	Asn
		595					600					605			
Asn	Ser	Asn	His	Val	Val	Ser	Leu	Thr	Gly	Lys	Glu	Arg	Glu	Leu	Ser
	610					615						620			
Val	Gly	Arg	Met	Phe	Ala	Met	Gln	Pro	Gly	Met	Phe	Arg	Gln	Ile	Gln
625					630					635					640
Ile	Leu	Ala	Glu	Lys	Met	Ile	Ala	Glu	Asn	Ile	Leu	Gln	Phe	Phe	Pro
				645					650					655	
Glu	Ser	Leu	Thr	Arg	Tyr	Gly	Asp	Leu	Glu	Leu	Gln	Lys	Ile	Leu	Glu
			660					665					670		
Leu	Lys	Ala	Gly	Ile	Ser	Asn	Lys	Ser	Asn	Arg	Tyr	Asn	Asp	Asn	Tyr
		675					680					685			
Asn	Asn	Tyr	Ile	Ser	Lys	Cys	Ser	Ile	Ile	Thr	Asp	Leu	Ser	Lys	Phe
	690					695					700				
Asn	Gln	Ala	Phe	Arg	Tyr	Glu	Thr	Ser	Cys	Ile	Cys	Ser	Asp	Val	Leu

705					710					715				720	
Asp	Glu	Leu	His	Gly	Val	Gln	Ser	Leu	Phe	Ser	Trp	Leu	His	Leu	Thr
				725					730					735	
Ile	Pro	Leu	Val	Thr	Ile	Ile	Cys	Thr	Tyr	Arg	His	Ala	Pro	Pro	Phe
			740					745					750		
Ile	Lys	Asp	His	Val	Val	Asn	Leu	Asn	Glu	Val	Asp	Glu	Gln	Ser	Gly
		755					760					765			
Leu	Tyr	Arg	Tyr	His	Met	Gly	Gly	Ile	Glu	Gly	Trp	Cys	Gln	Lys	Leu
	770					775					780				
Trp	Thr	Ile	Glu	Ala	Ile	Ser	Leu	Leu	Asp	Leu	Ile	Ser	Leu	Lys	Gly
785					790					795					800
Lys	Phe	Ser	Ile	Thr	Ala	Leu	Ile	Asn	Gly	Asp	Asn	Gln	Ser	Ile	Asp
				805					810					815	
Ile	Ser	Lys	Pro	Val	Arg	Leu	Ile	Glu	Gly	Gln	Thr	His	Ala	Gln	Ala
			820					825						830	
Asp	Tyr	Leu	Leu	Ala	Leu	Asn	Ser	Leu	Lys	Leu	Leu	Tyr	Lys	Glu	Tyr
		835					840					845			
Ala	Gly	Ile	Gly	His	Lys	Leu	Lys	Gly	Thr	Glu	Thr	Tyr	Ile	Ser	Arg
	850					855					860				
Asp	Met	Gln	Phe	Met	Ser	Lys	Thr	Ile	Gln	His	Asn	Gly	Val	Tyr	Tyr
865					870					875					880
Pro	Ala	Ser	Ile	Lys	Lys	Val	Leu	Arg	Val	Gly	Pro	Trp	Ile	Asn	Thr
				885					890					895	
Ile	Leu	Asp	Asp	Phe	Lys	Val	Ser	Leu	Glu	Ser	Ile	Gly	Ser	Leu	Thr
		900						905					910		
Gln	Glu	Leu	Glu	Tyr	Arg	Gly	Glu	Ser	Leu	Leu	Cys	Ser	Leu	Ile	Phe
		915				920						925			
Arg	Asn	Ile	Trp	Leu	Tyr	Asn	Gln	Ile	Ala	Leu	Gln	Leu	Arg	Asn	His
	930					935					940				
Ala	Leu	Cys	His	Asn	Lys	Leu	Tyr	Leu	Asp	Ile	Leu	Lys	Val	Leu	Lys
945					950					955					960
His	Leu	Lys	Thr	Phe	Asn	Leu	Asp	Ser	Ile	Asp	Met	Ala	Leu	Ser	
				965				970					975		
Leu	Tyr	Met	Asn	Leu	Pro	Met	Leu	Phe	Gly	Gly	Gly	Asp	Pro	Asn	Leu
		980					985					990			
Leu	Tyr	Arg	Ser	Phe	Tyr	Arg	Arg	Thr	Pro	Asp	Phe	Leu	Thr	Glu	Ala
	995						1000					1005			
Ile	Val	His	Ser	Val	Phe	Val	Leu	Ser	Tyr	Tyr	Thr	Gly	His	Asp	
	1010					1015						1020			
Leu	Gln	Asp	Lys	Leu	Gln	Asp	Leu	Pro	Asp	Asp	Arg	Leu	Asn	Lys	
	1025					1030						1035			
Phe	Leu	Thr	Cys	Ile	Ile	Thr	Phe	Asp	Lys	Asn	Pro	Asn	Ala	Glu	
	1040					1045						1050			
Phe	Val	Thr	Leu	Met	Arg	Asp	Pro	Gln	Ala	Leu	Gly	Ser	Glu	Arg	
	1055					1060						1065			
Gln	Ala	Lys	Ile	Thr	Ser	Glu	Ile	Asn	Arg	Leu	Ala	Val	Thr	Glu	
	1070					1075						1080			
Val	Leu	Ser	Ile	Ala	Pro	Asn	Lys	Ile	Phe	Ser	Lys	Ser	Ala	Gln	
	1085					1090						1095			
His	Tyr	Thr	Thr	Thr	Glu	Ile	Asp	Leu	Asn	Asp	Ile	Met	Gln	Asn	
	1100					1105						1110			
Ile	Glu	Pro	Thr	Tyr	Pro	His	Gly	Leu	Arg	Val	Val	Tyr	Glu	Ser	
	1115					1120						1125			
Leu	Pro	Phe	Tyr	Lys	Ala	Glu	Lys	Ile	Val	Asn	Leu	Ile	Ser	Gly	
	1130					1135						1140			
Thr	Lys	Ser	Ile	Thr	Asn	Ile	Leu	Glu	Lys	Thr	Ser	Ala	Ile	Asp	
	1145					1150						1155			
Thr	Thr	Asp	Ile	Asn	Arg	Ala	Thr	Asp	Met	Met	Arg	Lys	Asn	Ile	
	1160					1165						1170			
Thr	Leu	Leu	Ile	Arg	Ile	Leu	Pro	Leu	Asp	Cys	Asn	Lys	Asp	Lys	
	1175					1180						1185			

Arg	Glu	Leu	Leu	Ser	Leu	Glu	Asn	Leu	Ser	Ile	Thr	Glu	Leu	Ser
1190						1195					1200			
Lys	Tyr	Val	Arg	Glu	Arg	Ser	Trp	Ser	Leu	Ser	Asn	Ile	Val	Gly
1205						1210					1215			
Val	Thr	Ser	Pro	Ser	Ile	Met	Phe	Thr	Met	Asp	Ile	Lys	Tyr	Thr
1220						1225					1230			
Thr	Ser	Thr	Ile	Ala	Ser	Gly	Ile	Ile	Ile	Glu	Lys	Tyr	Asn	Val
1235						1240					1245			
Asn	Ser	Leu	Thr	Arg	Gly	Glu	Arg	Gly	Pro	Thr	Lys	Pro	Trp	Val
1250						1255					1260			
Gly	Ser	Ser	Thr	Gln	Glu	Lys	Lys	Thr	Met	Pro	Val	Tyr	Asn	Arg
1265						1270					1275			
Gln	Val	Leu	Thr	Lys	Lys	Gln	Arg	Asp	Gln	Ile	Asp	Leu	Leu	Ala
1280						1285					1290			
Lys	Leu	Asp	Trp	Val	Tyr	Ala	Ser	Ile	Asp	Asn	Lys	Asp	Glu	Phe
1295						1300					1305			
Met	Glu	Glu	Leu	Ser	Thr	Gly	Thr	Leu	Gly	Leu	Ser	Tyr	Glu	Lys
1310						1315					1320			
Ala	Lys	Lys	Leu	Phe	Pro	Gln	Tyr	Leu	Ser	Val	Asn	Tyr	Leu	His
1325						1330					1335			
Arg	Leu	Thr	Val	Ser	Ser	Arg	Pro	Cys	Glu	Phe	Pro	Ala	Ser	Ile
1340						1345					1350			
Pro	Ala	Tyr	Arg	Thr	Thr	Asn	Tyr	His	Phe	Asp	Thr	Ser	Pro	Ile
1355						1360					1365			
Asn	His	Val	Leu	Thr	Glu	Lys	Tyr	Gly	Asp	Glu	Asp	Ile	Asp	Ile
1370						1375					1380			
Val	Phe	Gln	Asn	Cys	Ile	Ser	Phe	Gly	Leu	Ser	Leu	Met	Ser	Val
1385						1390					1395			
Val	Glu	Gln	Phe	Thr	Asn	Ile	Cys	Pro	Asn	Arg	Ile	Ile	Leu	Ile
1400						1405					1410			
Pro	Lys	Leu	Asn	Glu	Ile	His	Leu	Met	Lys	Pro	Pro	Ile	Phe	Thr
1415						1420					1425			
Gly	Asp	Val	Asp	Ile	Ile	Lys	Leu	Lys	Gln	Val	Ile	Gln	Lys	Gln
1430						1435					1440			
His	Met	Phe	Leu	Pro	Asp	Lys	Ile	Ser	Leu	Thr	Gln	Tyr	Val	Glu
1445						1450					1455			
Leu	Phe	Leu	Ser	Asn	Lys	Ala	Leu	Lys	Ser	Gly	Ser	His	Ile	Asn
1460						1465					1470			
Ser	Asn	Leu	Ile	Leu	Val	His	Lys	Met	Ser	Asp	Tyr	Phe	His	Asn
1475						1480					1485			
Asp	Tyr	Ile	Leu	Ser	Thr	Asn	Leu	Ala	Gly	His	Trp	Ile	Leu	Ile
1490						1495					1500			
Ile	Gln	Leu	Met	Lys	Asp	Ser	Lys	Gly	Ile	Phe	Glu	Lys	Asp	Trp
1505						1510					1515			
Gly	Glu	Gly	Tyr	Ile	Thr	Asp	His	Met	Phe	Ile	Asn	Leu	Asn	Val
1520						1525					1530			
Phe	Phe	Asn	Ala	Tyr	Lys	Thr	Tyr	Leu	Leu	Cys	Phe	His	Lys	Gly
1535						1540					1545			
Tyr	Gly	Lys	Ala	Lys	Leu	Glu	Cys	Asp	Met	Asn	Thr	Ser	Asp	Leu
1550						1555					1560			
Leu	Cys	Val	Leu	Glu	Leu	Ile	Asp	Ser	Ser	Tyr	Trp	Lys	Ser	Met
1565						1570					1575			
Ser	Lys	Val	Phe	Leu	Glu	Gln	Lys	Val	Ile	Lys	Tyr	Ile	Val	Asn
1580						1585					1590			
Gln	Asp	Thr	Ser	Leu	His	Arg	Ile	Lys	Gly	Cys	His	Ser	Phe	Lys
1595						1600					1605			
Leu	Trp	Phe	Leu	Lys	Arg	Leu	Asn	Asn	Ala	Lys	Phe	Thr	Val	Cys
1610						1615					1620			
Pro	Trp	Val	Val	Asn	Ile	Asp	Tyr	His	Pro	Thr	His	Met	Lys	Ala
1625						1630					1635			
Ile	Leu	Ser	Tyr	Ile	Asp	Leu	Val	Arg	Met	Gly	Leu	Ile	Asn	Val

1640	Asp Lys Leu Thr Ile Lys	1645	Asn Lys Asn Lys Phe	1650	Asn Asp Glu Phe
1655	Tyr Thr Ser Asn Leu Phe	1660	Tyr Ile Ser Tyr Asn	1665	Phe Ser Asp Asn
1670	Thr His Leu Leu Thr Lys	1675	Gln Ile Arg Ile Ala	1680	Asn Ser Glu Leu
1685	Glu Asn Asn Tyr Asn Lys	1690	Leu Tyr His Pro Thr	1695	Pro Glu Thr Leu
1700	Glu Asn Met Ser Leu Ile	1705	Pro Val Lys Ser Asn	1710	Asn Ser Asn Lys
1715	Pro Lys Ser Cys Ile Ser	1720	Gly Asn Thr Glu Ser	1725	Met Met Thr Ser
1730	Thr Phe Ser Asn Lys Met	1735	His Ile Lys Ser Ser	1740	Val Thr Thr
1745	Arg Leu Asn Tyr Ser Lys	1750	Gln Asp Leu Tyr Asn	1755	Leu Phe Pro Ile
1760	Val Val Ile Asp Arg Ile	1765	Ile Asp His Ser Gly	1770	Asn Thr Ala Lys
1775	Ser Asn Gln Leu Tyr Thr	1780	Thr Thr Ser His Gln	1785	Thr Ser Leu Val
1790	Arg Asn Ser Ala Ser Leu	1795	Tyr Cys Met Leu Pro	1800	Trp His His Val
1805	Asn Arg Phe Asn Phe Val	1810	Ser Ser Thr Gly Cys	1815	Lys Ile Ser
1820	Ile Glu Tyr Ile Leu Lys	1825	Asp Leu Lys Ile Lys	1830	Asp Pro Ser Cys
1835	Ile Ala Phe Ile Gly Glu	1840	Gly Ala Gly Asn Leu	1845	Leu Leu Arg Thr
1850	Val Val Glu Leu His Pro	1855	Asp Ile Arg Tyr Ile	1860	Tyr Arg Ser Leu
1865	Lys Asp Cys Asn Asp His	1870	Ser Leu Pro Ile Glu	1875	Phe Leu Arg Leu
1880	Tyr Asn Gly His Ile Asn	1885	Ile Asp Tyr Gly Glu	1890	Asn Leu Thr Ile
1895	Pro Ala Thr Asp Ala Thr	1900	Asn Asn Ile His Trp	1905	Ser Tyr Leu His
1910	Ile Lys Phe Ala Glu Pro	1915	Ile Ser Ile Phe Val	1920	Cys Asp Ala Glu
1925	Leu Pro Val Thr Ala Asn	1930	Trp Ser Lys Ile Ile	1935	Ile Glu Trp Ser
1940	Lys His Val Arg Lys Cys	1945	Lys Tyr Cys Ser Ser	1950	Val Asn Arg Cys
1955	Ile Leu Ile Ala Lys Tyr	1960	His Ala Gln Asp Asp	1965	Ile Asp Phe Lys
1970	Leu Asp Asn Ile Thr Ile	1975	Leu Lys Thr Tyr Val	1980	Cys Leu Gly Ser
1985	Lys Leu Lys Gly Ser Glu	1990	Val Tyr Leu Val Leu	1995	Thr Ile Gly Pro
2000	Ser Asn Ile Leu Pro Val	2005	Phe Asn Val Val Gln	2010	Asn Ala Lys Leu
2015	Ile Leu Ser Arg Thr Lys	2020	Asn Phe Ile Met Pro	2025	Lys Lys Thr Asp
2030	Lys Glu Ser Ile Asp Ala	2035	Asn Ile Lys Ser Leu	2040	Ile Pro Phe Leu
2045	Cys Tyr Pro Ile Thr Lys	2050	Lys Gly Ile Lys Thr	2055	Ser Leu Ser Lys
2060	Leu Lys Ser Val Val Asn	2065	Gly Asp Ile Leu Ser	2070	Tyr Ser Ile Ala
2075	Gly Arg Asn Glu Val Phe	2080	Ser Asn Lys Leu Ile	2085	Asn His Lys His
2090		2095		2100	

Met	Asn	Ile	Leu	Lys	Trp	Leu	Asp	His	Val	Leu	Asn	Phe	Arg	Ser
2105						2110					2115			
Thr	Glu	Leu	Asn	Tyr	Asn	His	Leu	Tyr	Met	Ile	Glu	Ser	Thr	Tyr
2120						2125					2130			
Pro	Tyr	Leu	Ser	Glu	Leu	Leu	Asn	Ser	Leu	Thr	Thr	Asn	Glu	Leu
2135						2140					2145			
Lys	Lys	Leu	Ile	Lys	Ile	Thr	Gly	Ser	Val	Leu	Tyr	Asn	Leu	Pro
2150						2155					2160			
Asn	Glu	Gln												
2165														

<210> 12
 <211> 292
 <212> PRT
 <213> respiratory syncytial virus B 9320

<400> 12

Met	Ser	Lys	His	Lys	Ser	Gln	Arg	Thr	Ala	Arg	Thr	Leu	Glu	Lys	Thr
1				5					10					15	
Trp	Asp	Thr	Leu	Asn	His	Leu	Ile	Val	Ile	Ser	Ser	Cys	Leu	Tyr	Arg
			20					25					30		
Leu	Asn	Leu	Lys	Ser	Ile	Ala	Gln	Ile	Ala	Leu	Ser	Val	Leu	Ala	Met
			35				40					45			
Ile	Ile	Ser	Thr	Ser	Leu	Ile	Ile	Ala	Ala	Ile	Ile	Phe	Ile	Ile	Ser
	50					55					60				
Ala	Asn	His	Lys	Val	Thr	Leu	Thr	Thr	Val	Thr	Val	Gln	Thr	Ile	Lys
65					70					75				80	
Asn	His	Thr	Glu	Lys	Asn	Ile	Thr	Thr	Tyr	Leu	Thr	Gln	Val	Ser	Pro
				85					90					95	
Glu	Arg	Val	Ser	Ser	Ser	Ile	Gln	Pro	Thr	Thr	Thr	Ser	Pro	Ile	His
			100					105					110		
Thr	Asn	Ser	Ala	Thr	Ile	Ser	Pro	Asn	Thr	Lys	Ser	Glu	Thr	His	His
			115				120					125			
Thr	Thr	Thr	Gln	Ala	Lys	Ser	Arg	Ile	Thr	Thr	Ser	Thr	Gln	Thr	Asn
			130				135					140			
Lys	Pro	Ser	Thr	Lys	Ser	Arg	Ser	Lys	Asn	Pro	Pro	Lys	Lys	Pro	Lys
145					150					155				160	
Asp	Asp	Tyr	His	Phe	Glu	Val	Phe	Asn	Phe	Val	Pro	Cys	Ser	Ile	Cys
				165					170					175	
Gly	Asn	Asn	Gln	Leu	Cys	Lys	Ser	Ile	Cys	Lys	Thr	Ile	Pro	Ser	Asn
			180					185				190			
Lys	Pro	Lys	Lys	Lys	Pro	Thr	Ile	Lys	Pro	Thr	Asn	Lys	Pro	Thr	Val
			195				200					205			
Lys	Thr	Thr	Asn	Lys	Arg	Asp	Pro	Lys	Thr	Pro	Ala	Lys	Met	Met	Lys
			210			215					220				
Lys	Glu	Thr	Thr	Thr	Asn	Pro	Thr	Lys	Lys	Pro	Thr	Leu	Lys	Thr	Thr
225					230					235					240
Glu	Gly	Asp	Thr	Ser	Thr	Ser	Gln	Ser	Thr	Val	Leu	Asp	Thr	Thr	Thr
				245					250					255	
Ser	Lys	His	Thr	Ile	Gln	Gln	Gln	Ser	Leu	His	Ser	Ile	Thr	Ser	Glu
			260				265						270		
Asn	Thr	Pro	Asn	Ser	Thr	Gln	Ile	Pro	Thr	Ala	Thr	Glu	Ala	Ser	Thr
			275				280					285			
Ser	Asn	Ser	Thr												
290															

<210> 13
 <211> 15225

<212> DNA
 <213> respiratory syncytial virus B 1

<400> 13

acgcgaaaaa	atgcgtacta	caaacttgca	cattcgghaaa	aaatggggca	aataagaatt	60
tgataagtgc	tattttaagtc	taaccttttc	aatcagaaaat	ggggtgcaat	tcactgagca	120
tgataaagg	tagattacaa	aattttatttg	acaatgacga	agtagcattg	ttaaaaataa	180
catgtttatac	tgacaaaatta	attctttctga	ccaatgcatt	agccaaaagca	gcaatacata	240
caattaaatt	aaacgggtata	gtttttatac	atgtttataac	aagcagtga	gtgtgccctg	300
ataacaacat	tgtagtaaaa	tctaacttta	caacaatgcc	aatattacaa	aacggaggat	360
acatatggga	attgattgag	ttgacacact	gctctcaatt	aaacgggtcta	atggatgata	420
attgtgaaat	caaattttct	aaaagactaa	gtgactcagt	aatgactaat	tatatgaatc	480
aaatatctga	tttacttg	cttgatctca	attcatgaat	tatgtttagt	ctaactcaat	540
agacatgtgt	ttattacat	tttagttaat	ataaaaaactc	atcaaaggga	aatgggggca	600
ataaactcac	ctaatacaatc	aaactatgag	cactacaaaat	gacaacacta	ctatgcaaag	660
attaatgac	acggacatga	gacccctgtc	gatggattca	ataataacat	ctctcaccaa	720
agaaatcatc	acacacaaat	tcatatactt	gataaacaat	gaatgtattg	taagaaaact	780
tgatgaaaga	caagctacat	ttacattctt	agtcaattat	gagatgaagc	tactgcacaa	840
agtagggagt	accaaataca	agaaatacac	tgaatataat	acaaaatatg	gcactttccc	900
catgcctata	tttatcaatc	atggcgggtt	tctagaatgt	attggcatta	agcctacaaa	960
acacactcct	ataatatata	aatatgacct	caaccgta	attccaacaa	aaaaaaccaa	1020
cccaacccaa	ccaagctatt	cctcaaacaa	caatgctcaa	tagttaagaa	ggagctaatac	1080
cgttttagta	attaaaaata	aaagtaaagc	caataacata	aattggggca	aatacaaaaga	1140
tggctcttag	caaagtcaag	ttaaatgata	cattaataaa	ggatcagctg	ctgtcatcca	1200
gcaaatacac	tattcaacgt	agtacaggag	ataatattga	cactcccaat	tatgatgtgc	1260
aaaaacacct	aaacaaacta	tgtggtatgc	tattaatcac	tgaagatgca	aatcataaat	1320
tcacaggatt	aataggtatg	ttatatgcta	tgtccagggt	aggaaggga	gacactataa	1380
agatacttaa	agatgctgga	tatcatgtta	aagctaattg	agtagatata	acaacatatc	1440
gtcaagatat	aaatggaaag	gaaatgaaat	tcgaagtatt	aacattatca	agcttgacat	1500
cagaaataca	agtcaatatt	gagatagaat	ctagaaaatc	ctacaaaaaa	atgctaaaag	1560
agatgggaga	agtggctcca	gaatataggc	atgattctcc	agactgtggg	atgataatac	1620
tgtgtatagc	agcacttgta	ataaccaa	tagcagcagg	agacagatca	ggtcttacag	1680
cagtaattag	gagggcaaac	aatgtcttaa	aaaatgaaat	aaaacgctac	aagggtctca	1740
taccaaagga	tatagctaac	agtttttatg	aagtgtttga	aaaacaccct	catcttatag	1800
atgtttttgt	gcactttggc	attgcacaat	catcaacaag	agggggtagt	agagttgaag	1860
gaatctttgc	aggattgttt	atgaatgcct	atggttcagg	gcaagtaatg	ctaagatggg	1920
gagtttttagc	caaactctgta	aaaaatatca	tgctagggtca	tgctagtgtc	caggcagaaa	1980
tggagcaagt	tgtggaagtc	tatgagtatg	cacagaagtt	gggaggagaa	gctggattct	2040
accatatatt	gaacaatcca	aaagcatcat	tgctgtcatt	aactcaattt	cctaacttct	2100
caagtgtggt	cctaggcaat	gcagcaggtc	taggcataat	gggagagtat	agaggtagc	2160
caagaataca	ggatctttat	gatgcagcca	aagcatatgc	agagcaactc	aaagaaatg	2220
gagtaataaa	ctacagtgta	ttagacttaa	cagcagaaga	attggaagcc	ataaagaatc	2280
aactcaaccc	taaagaagat	gatgtagagc	tttaagttaa	caaaaaatac	ggggcaataa	2340
agtcaacatg	gagaagtttg	cacctgaatt	tcattggagaa	gatgcaataa	acaaagctac	2400
caaattccta	gaatcaataa	agggcaagtt	cgcattcatcc	aaagatccta	agaagaaaga	2460
tagcataata	tctgttaact	caatagatat	agaagtaacc	aaagagagcc	cgataacatc	2520
tggcaccaac	atcatcaatc	caacaagtga	agccgacagt	accccagaaa	ccaaagccaa	2580
ctacccaaga	aaacccctag	taagcttcaa	agaagatctc	accccaagtg	acaacccttt	2640
ttctaagttg	tacaaagaaa	caatagaaac	atttgataac	aatgaagaag	aatctagcta	2700
ctcatatgaa	gagataaatg	atcaaacaaa	tgacaacatt	acagcaagac	tagatagaat	2760
tgatgaaaaa	ttaagtga	tattaggaat	gtccatatac	ttagtagttg	caagtgcagg	2820
accacttca	gctcgcgatg	gaataagaga	tgctatggtt	ggtctgagag	aagaaatgat	2880
agaaaaaata	agagcgggaag	cattaatgac	caatgatagg	ttagaggcta	tggcaagact	2940
taggaatgag	gaaagcgaaa	aaatggcaaa	agacacctca	gatgaagtgc	ctcttaatcc	3000
aacttccaaa	aaattgagtg	acttggttga	agacaacgat	agtgacaatg	atctgtcact	3060
tgatgatttt	tgatcagtga	tcaactcact	cagcaatcaa	caacatcaat	aaaacagaca	3120
tcaatccatt	gaatcaactg	ccagaccgaa	caaacaaatg	tccgtcagcg	gaaccaccaa	3180
ccaatcaatc	aaccaactga	tccatcagca	acctgacgaa	attaacaata	tagtaacaaa	3240
aaaagaacaa	gatggggcaa	atatggaaac	atacgtgaac	aagcttcacg	aaggctccac	3300
atacacagca	gctgttcagt	acaatgttct	agaaaaagat	gatgatcctg	catcactaac	3360
aatatgggtg	cctatgttcc	agtcattctgt	accagcagac	ttgctcataa	aagaacttgc	3420

aagcatcaac	atactagtga	agcagatctc	tacgccccaa	ggaccttcac	tacgagtcac	3480
gattaactca	agaagtgtg	tgctgggtca	aatgcctagt	aatttcatca	taagcgcaaa	3540
tgtatcatta	gatgaaagaa	gcaaatttagc	atatgatgta	actacacctt	gtgaaatcaa	3600
agcatgcagt	ctaacatgct	taaaagttaa	aagtatgtta	actacagtca	aagatcttac	3660
catgaagaca	ttcaacccca	ctcatgagat	cattgctcta	tgtgaatttg	aaaatattat	3720
gacatcaaaa	agagtaataa	taccaaccta	tctaagacca	attagtgtca	aaaacaagga	3780
tctgaactca	ctagaaaaca	tagcaaccac	cgaattcaaa	aatgctatca	ccaatgcgaa	3840
aattattccc	tatgctggat	tagtattagt	tatcacagtt	actgacaata	aaggagcatt	3900
caaatatatc	aagccacaga	gtcaattttat	agtagatctt	ggtgcctacc	tagaaaaaga	3960
gagcatatat	tatgtgacta	ctaattggaa	gcatacagct	acacgttttt	caatcaaacc	4020
actagaggat	taaatttaat	tatcaacact	gaatgacagg	tccacatata	tcctcaaact	4080
acacactata	tccaaacatc	atgaacatct	acactacaca	cttcatcaca	caaaccaatc	4140
ccactcaaaa	tccaaaatca	ctaccagcca	ctatctgcta	gacctagagt	gcgaataggt	4200
aaataaaacc	aaaatatggg	gtaaatagac	attagttaga	gttcaatcaa	tctcaacaac	4260
catttatacc	gccaatcaaa	tacataatac	ataaatctta	aaatgggaaa	tacatccatc	4320
acaatagaat	tcacaagcaa	attttggccc	tattttacac	taatacatat	gatcttaact	4380
ctaattctct	tactaattat	aatcactatt	atgattgcaa	tactaaataa	gctaagttaa	4440
cataaaacat	tctgtaacaa	tactcttgaa	ctaggacaga	tgcatacaat	caacacatag	4500
tgctctacca	tcatgtgtgt	tcaaattata	atcctgtata	tataaacaac	caaatccaat	4560
cttctcacag	agtcatggtg	tcgcaaaacc	acgccaacta	tcatggtagc	atagagtagt	4620
tatttataaaa	ttaacataat	gatgaattat	tagtatggga	tcaaaaacaa	cattggggca	4680
aatgcaacca	tgtccaaaca	caagaatcaa	cgcactgcca	ggactctaga	aaagacctgg	4740
gatactctca	atcatctaata	tgtaatatcc	tcttgtttat	acagattaaa	tttaaaatct	4800
atagcacaaa	tagcactatc	agttctggga	atgataatct	caacctctct	cataattgca	4860
gccataaata	tcataatctc	tgccaatcac	aaagttacac	taacaacggt	cacagttcaa	4920
acaataaaaa	accacactga	aaaaaacatc	accacctacc	ttactcaagt	cccaccagaa	4980
aggggttagct	catccaaaca	acctacaacc	acatcaccaa	tccacacaaa	ttcagccaca	5040
acatcaccca	acacaaagtc	agaaacacac	cacacaacag	cacaaaccaa	aggcagaacc	5100
accacctcaa	cacagaccac	caagccgagc	acaaaaccac	gcctaaaaaa	tccaccaaaa	5160
aaaccaaaaag	atgattacca	ttttgaagtg	ttcaacttcg	ttccctgtag	tatatgtggc	5220
aacaatcaac	tttgcaaatc	catctgtaaa	acaataccaa	gcaacaaacc	aaagaagaaa	5280
ccaaccatca	aaccacaaaa	caaaccaacc	accaaaacca	caaaacaaaag	agaccacaaa	5340
acaccagcca	aaacgacgaa	aaaagaaact	accaccaacc	caacaaaaaa	accaaccctc	5400
acgaccacag	aaagagacac	cagcacctca	caatccactg	tgctcgacac	aaccacatta	5460
gaacacacaa	tccaacagca	atccctccac	tcaaccaccc	ccgaaaacac	acccaactcc	5520
acacaaacac	ccacagcatc	cgagccctct	acatcaaatt	ccaccacaaa	taccacatca	5580
catgcttagt	tattcaaaaa	ctacatctta	gcagaaaacc	gtgacctatc	aagcaagaac	5640
gaaattaaac	ctggggcaaaa	taaccatgga	gctgctgata	cacagggttaa	gtgcaatctt	5700
cctaactctt	gctattaatg	cattgtacct	cacctcaagt	cagaacataa	ctgaggagtt	5760
ttaccaatcg	acatgtagtg	cagttagcag	aggttatatt	agtgtcttaa	gaacagggtg	5820
gtataccagt	gtcataacaa	tagaattaa	taataataaa	gaaaccaaata	gcaattggaac	5880
tgacataaaa	gtaaaaccta	taaaacaaga	atagataaag	tataagaatg	cagtgcagaa	5940
attacagcta	cttatgcaaa	acacaccagc	tgccaacaac	cgggccagaa	gagaagcacc	6000
acagtatatg	aactatacaa	tcaataccac	taaaaacctt	aatgtatcaa	taagcaagaa	6060
gaggaaacga	agatttcttg	gcttcttggt	agggtgtaga	tctgcaatag	caagtgggat	6120
agctgtatcc	aaagttctac	accttgaagg	agaagtgaac	aagatcaaaa	atgctttgtt	6180
atctacaaaac	aaagctgtag	tcagtctatc	aaatgggggc	agtgttttaa	ccagcaaagt	6240
gttagatctc	aagaattaca	taaataacca	attattaccc	atagtaaata	aacagagctg	6300
tcgcatctcc	aacattgaaa	cagttataga	attccagcag	aagaacagca	gattgttgga	6360
aatcaacaga	gaattcagtg	tcaatgcagg	tgtaacaaca	cctttaagca	cttacatggt	6420
aacaaacagt	gagttactat	cattgatcaa	tgatatgcct	ataacaaatg	atcagaaaaa	6480
attaatgtca	agcaatgttc	agatagtaa	gcaacaaagt	tattctatca	tgtctataat	6540
aaaggaagaa	gtccttgcat	atgttggtaca	gctacctatc	tatgggtgaa	tagatacacc	6600
ttgttggaac	ttacacacat	cacctctatg	caccaccaac	atcaaagaag	gatcaaatat	6660
ttgtttaaca	aggactgata	gaggatggta	ttgtgataat	gcaggatcag	tatccttctt	6720
tccacaggct	gacacttgta	aagtacagtc	caatcgagta	ttttgtgaca	ctatgaacag	6780
tttgacatta	ccaagtgaag	tcagcctttg	taacactgac	atattcaatt	ccaagtatga	6840
ctgcaaaaatt	atgacatcaa	aaacagacat	aagcagctca	gtaattactt	ctctgggagc	6900
tatagtgtca	tgctatggta	aaactaaatg	cactgcatcc	aacaaaaatc	gtgggattat	6960
aaagacattt	tctaattggt	gtgactatgt	gtcaaacaaa	ggagtagata	ctgtgtcagt	7020
gggcaacact	ttatactatg	taaacaaagt	ggaaggcaag	aacctttatg	taaaagggga	7080

acctataata	aattactatg	accctctagt	gtttccttct	gatgagtttg	atgcatcaat	7140
atctcaagtc	aatgaaaaaa	tcaatcaaag	tttagctttt	attcgtagat	ctgatgaatt	7200
actacataat	gtaaatactg	gcaaactctac	tacaaatatt	atgataacta	caattattat	7260
agtaatcatt	gtagtattgt	tatcattaat	agctattggg	ttgctgttgt	attgcaaagc	7320
caaaaacaca	ccagttacac	taagcaaaga	ccaactaagt	ggaatcaata	atattgcatt	7380
cagcaaatag	acaaaaaacc	acctgatcat	gtttcaacaa	cagtctgctg	atcaccaatc	7440
ccaaatcaac	ccataacaaa	cacttcaaca	tcacagtaca	ggctgaatca	tttcttcaca	7500
tcattgctacc	cacacaacta	agctagatcc	ttaactcata	gttacataaa	aacctcaagt	7560
atcacaatca	aacactaaat	caacacatca	ttcacaaaaat	taacagctgg	ggcaaataatg	7620
tcgcgaagaa	atccttgtaa	at ttgagatt	agaggctcatt	gcttgaatgg	tagaagatgt	7680
cactacagtc	ataattactt	tgaatggcct	cctcatgcct	tactagttag	gcaaaacttc	7740
atgttaaaca	agatactcaa	gtcaatggac	aaaagcatag	acactttgtc	tgaaataagt	7800
ggagctgctg	aactggacag	aacagaagaa	tatgctcttg	gtatagttgg	agtgctagag	7860
agttacatag	gatctataaa	caacataaca	aaacaatcag	catgtgttgc	tatgagtaaa	7920
cttcttattg	agatcaatag	tgatgacatt	aaaaagctga	gagataatga	agaacccaat	7980
tcacctaaga	taagatgtga	caatactggt	atatcataca	ttgagagcaa	tagaaaaaac	8040
aacaagcaaa	caatccatct	gctcaaaaga	ctaccagcag	acgtgctgaa	gaagacaata	8100
aaaaacacat	tagatatcca	caaaagcata	atcataagca	acccaaaaga	gtcaaccgtg	8160
aatgatcaaa	atgaccaaac	caaaaataat	gatattaccg	gataaatatc	cttgtagtat	8220
atcatccata	ttgatttcaa	gtgaaagcat	gattgctaca	ttcaatcata	aaaacatatt	8280
acaatttaac	cataaccatt	tggataacca	ccagcgttta	ttaaataata	tatttgatga	8340
aattcattgg	acacctaaaa	acttattaga	tgccactcaa	caatttctcc	aacatcttaa	8400
catccctgaa	gatatatata	caatatatat	attagtgtca	taatgcttgg	ccataacgat	8460
tctatatcat	ccaaccataa	aactatctta	ataaggttat	gggacaaaat	ggatcccatt	8520
attaatggaa	actctgtcaa	tgtgtatcta	actgtagttt	attttaaagg	tgttatctct	8580
ttttcagaat	gtaatgcttt	agggagttac	ctttttaacg	gcccttatct	caaaaatgat	8640
tacaccaact	taattagtag	acaaagtcca	ctactagagc	atatgaatct	taaaaaacta	8700
actataacac	agtcattaat	atctagatat	cataaagggtg	aactgaaatt	agaagaacca	8760
acttattttc	agtcattact	tatgacatat	aaaagcatgt	cctcgtctga	acaaattgct	8820
acaactaact	tacttaaaaa	aataatacga	agagctatag	aaataagtga	tgtaaagggtg	8880
tacgccatct	tgaataaact	aggactaaag	gaaaaggaca	gagttaagcc	caacaataat	8940
tcaggtgatg	aaaactcagt	acttacaact	ataattaaag	atgatatact	ttcggctgtg	9000
gaaagcaact	aatcatatac	aaattcagac	aaaaatcact	cagtaaatac	aaatatcact	9060
atcaaaaaca	cactcttgaa	aaaattgtag	tgttcaatgc	aacatcctcc	atcatggtta	9120
atacactggg	tcaattttata	tacaaaatta	aataacatat	taacacaata	tcgatcaaat	9180
gaggtaaaaa	gtcatgggtt	tatatttaata	gataatcaaa	ctttaagtg	ttttcagttt	9240
atttttaaatc	aatatgggtg	tatcgtttat	cataaaggac	tcaaaaaaat	cacaactact	9300
acttacaatc	aattttttaac	atggaaagac	atcagcctta	gcagattaaa	tgtttgctta	9360
attacttgga	taagtaattg	tttgaataca	ttaaataaaa	gcttagggct	gagatgtgga	9420
ttcaataatg	ttgtgttatc	acaattatatt	ctttatggag	attgtatact	gaaattatatt	9480
cataatgaag	gcttctacat	aataaaaagaa	gtagagggat	ttattatgtc	tttaattcta	9540
aacataacag	agaagaatca	at tttaggaa	cgattttata	atagcatgct	aaataacatc	9600
acagatgcag	ctattaaggc	tcaaaaagaac	ctactatcaa	gggtatgtca	cactttatta	9660
gacaagacag	tgtctgataa	tatcataaat	ggtaaatgga	taatcctatt	aagtaaattt	9720
cttaaatgga	ttaagcttgc	aggtgataat	aatctcaata	atttgagtga	gctatatattt	9780
ctcttcagaa	tctttggaca	tccaatgggt	gatgaaagac	aagcaatgga	tgctgtaaga	9840
attaactgta	atgaaactaa	gttctactta	ttaagtagtc	taagtacgtt	aagagggtgct	9900
ttcattttata	gaatcataaa	agggtttgta	aatacctaca	acagatggcc	cactttaagg	9960
aatgctattg	tcctacctct	aagatgggtta	aactattata	aacttaatac	ttatccatct	10020
ctacttgaaa	tcacagaaaa	tgatttgatt	at ttttatcag	gattgcgggt	ctatcgtgaa	10080
tttcatctgc	ctaaaaaagt	ggatcttgaa	atgataataa	atgacaaaagc	catttccact	10140
ccaaaagatc	taatatggac	tagttttcct	agaaattaca	tgccatcaca	tatacaaaaat	10200
tatatagaac	atgaaaagtt	gaagttctct	gaaagcgaca	gatcaagaag	agtactagag	10260
tattacttga	gagataataa	attcaatgaa	tgcatcttat	acaattgtgt	agtcaatcaa	10320
agctatctca	acaactctaa	tcacgtggta	tcactaactg	gtaaagaaaag	agagctcagt	10380
gtaggtagaa	tgtttgctat	gcaaccagggt	atgttttaggc	aaatccaaat	cttagcagag	10440
aaaatgatag	ccgaaaatat	tttacaattc	ttccctgaga	gtttgacaag	atatgggtgat	10500
ctagagcttc	aaaagatatt	agaattaaaa	gcaggaataa	gcaacaagtc	aaatcgttat	10560
aatgataact	acaacaatta	tatcagtaaa	tgttctatca	ttacagatct	tagcaaatctc	10620
aatcaagcat	ttagatatga	aacatcatgt	atctgcagtg	atgtattaga	tgaactgcat	10680
ggagtacaat	ctctgttctc	ttgggttgc	ttaacaatac	ctcttgtcac	aataatatgt	10740

acatatagac	atgcacctcc	tttcataaag	gatcatgttg	ttaatcttaa	tgaagttgat	10800
gaacaaagt	gattatacag	atatcatatg	gggtggtatt	agggctggtg	tcaaaaactg	10860
tggaccattg	aagctatatc	attattagat	ctaatatctc	tcaaagggaa	attctctatc	10920
acagctctga	taaagtgtga	taatcagtc	attgatataa	gtaaaccagt	tagacttata	10980
gagggtcaga	cccatgctca	agcagattat	ttggttagcat	taaatagcct	taaattgcta	11040
tataaagagt	atgcaggtat	aggccataag	cttaagggaa	cagagaccta	tatatcccga	11100
gatatgcagt	tcatgagcaa	aacaatccag	cacaatggag	tgtactatcc	agccagtatc	11160
aaaaaagtc	tgagagtagg	tccatggata	aatacaatac	ttgatgattt	taaagttagt	11220
ttagaatcta	taggtagctt	aacacaggag	ttagaataca	gaggggaaag	cttattatgc	11280
agtttaatat	ttaggaacat	ttggttatac	aatcaaattg	ctttgcaact	ccgaaatcat	11340
gcattatgta	acaataagct	atatttagat	atattgaaag	tattaaaaca	cttaaaaact	11400
ttttttaatc	ttgatagtat	cgatatggcg	ttatcattgt	atatgaattt	gcctatgctg	11460
tttggtggtg	gtgatcctaa	tttgttatat	cgaagctttt	ataggagaac	tccagacttc	11520
cttacagaag	ctatagtaca	ttcagtggtt	gtggttagct	attatactgg	tcacgattta	11580
caagataagc	tccaggatct	tccagatgat	agactgaaca	aattcttgac	atgtgtcatc	11640
acattcgata	aaaatcccaa	tgccgagttt	gtaacattga	tgagggatcc	acaggcgtt	11700
gggtctgaaa	ggcaagctaa	aattactagt	gagattaata	gattagcagt	aacagaagtc	11760
ttaagtatag	ctccaaacaa	aattttttct	aaaagtgcac	aacattatac	taccactgag	11820
attgatctaa	atgacattat	gcaaaatata	gaaccaactt	accctcatgg	attaagagtt	11880
gtttatgaaa	gtctaccttt	ttataaagca	gaaaaaatag	ttaatcttat	atcaggaaca	11940
aaatccataa	ctaataact	tgaaaaaaca	tcagcaatag	atacaactga	tattaatagg	12000
gctactgata	tgatgaggaa	aaatataact	ttactttata	ggatacttcc	actagattgt	12060
aacaaagaca	aaagagagtt	attaagttta	gaaaatctta	gtataactga	attaagcaag	12120
tatgtaagag	aaagatcttg	gtcattatcc	aatatagtag	gagtaacatc	gccaagtagt	12180
atgttcacaa	tggacattaa	atatacaact	agcactatag	ccagtgggtat	aattatagaa	12240
aatataatag	ttaatagttt	aactcgtggt	gaaagaggac	ctactaagcc	atgggtaggt	12300
tcatctacgc	aggagaaaaa	aacaatgcca	gtgtacaata	gacaagtttt	aaccaaaaag	12360
caaagagacc	aaatagattt	attagcaaaa	ttagactggg	tatatgcac	catagacaac	12420
aaagatgaat	tcatggaaga	actgagtact	ggaacacttg	gactgtcata	tgaaaaagcc	12480
aaaaagttgt	ttccacaata	tctaagtgtc	aattattttac	accgtttaac	agtcagtagt	12540
agaccatgtg	aattccctgc	atcaatacca	gcttatagaa	caacaaatta	tcatttcgat	12600
actagtccca	tcaatcatgt	attaacagaa	aagtatggag	atgaagatat	cgacattgtg	12660
tttcaaaatt	gcataagttt	tggtcttagc	ctgatgtcgg	ttgtggaaca	attcacaaac	12720
atatgtccca	atagaattat	tctcataccg	aagctgaatg	agatacattt	gatgaaacct	12780
cctatatatta	caggagatgt	tgatatcatc	aagttgaagc	aagtgataca	aaaacagcat	12840
atgttcctac	cagataaaat	aagtttaacc	caatatgtag	aattattcct	aagtaacaaa	12900
gcacttaaat	ctggatctaa	catcaattct	aattttaatat	tagtacataa	aatgtctgat	12960
tattttcata	atgcttatat	tttaagtact	aatttagctg	gacattggat	tctaattatt	13020
caacttatga	aagattcaaa	aggtattttt	gaaaaagatt	ggggagaggg	gtacataact	13080
gatcatatgt	tcattaattt	gaatgttttc	tttaatgctt	ataagactta	tttgctatgt	13140
tttcataaag	gttatggtaa	agcaaaatta	gaatgtgata	tgaacacttc	agatcttctt	13200
tgtgttttgg	agtttaataga	cagtagctac	tggaaaatcta	tgtctaaagt	tttcctagaa	13260
caaaaagtc	taaaatacat	agtcaatcaa	gacacaagtt	tgcatagaat	aaaaggctgt	13320
cacagtttta	agttgtggtt	tttaaaacgc	cttaataatg	ctaaatttac	cgtatgccct	13380
tgggttggtt	acatagatta	tcaccaacaa	catatgaaag	ctatattatc	ttacatagat	13440
ttagttagaa	tggggttaat	aaatgtagat	aaattaacca	ttaaaaataa	aaacaaattc	13500
aatgatgaat	tttacacatc	aaatctcttt	tacattagtt	ataacttttc	agacaacact	13560
catttgctaa	caaaacaaat	agaattgtct	aattcagaat	tagaagataa	ttataacaaa	13620
ctatatcaac	caaccccaga	aacttttagaa	aatatatcat	taattcctgt	taaaagtaat	13680
aatagtaacc	aacctaaatt	ttgtataagt	ggaaataccg	aatctataat	gatgtcaaca	13740
ttctctaata	aaatgcatat	taaatcttcc	actgttacca	caagattcaa	ttatagcaaa	13800
caagacttgt	acaatttatt	tccaaatggt	gtgatagaca	ggattataga	tcattcaggt	13860
aatacagcaa	aatctaacca	actttacatc	accacttcac	atcagacatc	tttagtaagg	13920
aatagtgc	cactttattg	catgcttctt	tggcatcatg	tcaatagatt	taactttgta	13980
tttagttcca	caggatgcaa	gatcagttat	gagtatattt	taaaagatct	taagattaag	14040
gaccccagtt	gtatagcatt	cataggtgaa	ggagctggta	acttattatt	acgtacggta	14100
gtagaacttc	atccagacat	aagatacatt	tacagaagtt	taaaagattg	caatgatcat	14160
agtttaccta	ttgaatttct	aagattatac	aacgggcata	taaacataga	ttatgggtgag	14220
aaatttaacca	ttcctgctac	agatgcaact	tgaacacttc	attgggtctta	tttatcatata	14280
aaatttgag	aacctattag	catctttgtc	tgcgatgctg	aattacctgt	tacagccaat	14340
tggagtaaaa	ttataattga	atggagtaag	catgtaagaa	agtgcagta	ctgttcttct	14400

gtaaatagat	gcattttaat	cgcaaaatat	catgctcaag	atgatattga	tttcaaatta	14460
gataacatta	ctatatataa	aacttacgtg	tgccataggta	gcaagttaaa	aggatctgaa	14520
gtttacttag	tcottacaat	aggccctgca	aatatacttc	ctgtttttga	tggtgtgcaa	14580
aatgctaaat	tgattttttc	agaactaaa	aatttcatta	tgccataaaa	aactgacaag	14640
gaatctatcg	atgcaaatat	taaaagctta	atacctttcc	tttgttaccc	tataacaaaa	14700
aaaggaatta	agacttcatt	gtcaaaattg	aagagtgtag	ttaatgggga	tatattatca	14760
tattctatag	ctggacgtaa	tgaagtattc	agcaacaagc	ttataaacca	caagcatatg	14820
aatatcctaa	aatggctaga	tcattgtttta	aatttttagat	cagctgaact	taattacaat	14880
cattttataca	tgatagagtc	cacatatcct	tacttaagtg	aattgttaaa	tagtttaaca	14940
accaatgagc	tcaagaaact	gattaaaata	acaggtagtg	tactatacaa	ccttcccaac	15000
gaacagtaac	ttaaaatatc	attaacaagt	ttgggtcaa	ttagatgcta	acacatcatt	15060
atattatagt	tattaaaaaa	tatgcaaact	tttcaataat	ttagcttact	gattccaaaa	15120
ttatcatttt	atttttaagg	ggttgaataa	aagtctaaaa	ctaacaatga	tacatgtgca	15180
tttacaacac	aacgagacat	tagttttttg	cacttttttt	ctcgt		15225

<210> 14
<211> 868

<212> DNA
<213> respiratory syncytial virus B 9320

<400>	14					
agtcaacgca	ctgccaggac	tctagaaaag	acctgggata	ctcttaatca	tctaattgta	60
atatcctctt	gtttatacag	actaaaccta	aaatctatag	cacaaatagc	actatcagtt	120
ttggcaatga	taatctcaac	ctctctcata	attgcagcca	taatattcat	catctctgcc	180
aatcacaaa	ttacactaac	aacggttaca	gttcaaaca	taaaaaacca	cactgaaaaa	240
aacatcacca	cctaccttac	tcaagtctca	ccagaaaggg	ttagctcatc	catacaacct	300
acaaccacat	caccaatcca	cacaaattca	gctacaatat	caccaaatac	aaaatcgaaa	360
acacaccata	caacaacaca	agccaaaagc	agaatcacca	cttcaacaca	gaccaacaag	420
ccaagcacaa	aatcacgttc	aaaaaatcca	ccaaaaaac	caaaagatga	ttaccatttt	480
gaagtgttca	attttgttcc	ctgtagtata	tgtggcaaca	atcaactttg	caaatccatc	540
tgcaaaacaa	taccaagcaa	caaaccaaag	aaaaaaccaa	ccatcaaacc	cacaaacaaa	600
ccaaccgtca	aaaccacaaa	caaaagagac	ccaaaaacac	cagccaaaat	gatgaaaaaa	660
gaaaccacca	ccaacccaac	aaaaaaacca	accctcaaga	ccacagaagg	agacaccagc	720
acctcacat	ccactgtgct	cgacacaacc	acatcaaac	acacaatcca	acagcaatcc	780
ctccactcaa	tcacctccga	aaacacaccc	aactccacac	aaataccac	agcaaccgag	840
gcctccacat	caaattctac	ttaaaaaa				868

<210> 15
<211> 218
<212> DNA
<213> respiratory syncytial virus B 9320

<400>	15					
attggcatta	agcctacaaa	acacactcct	ataatatata	aatatgacct	caaccgtaa	60
attccaacaa	aaaactaacc	catccaaact	aagctattcc	ttaaataaca	gtgctcaaca	120
gttaagaagg	ggctaataca	tttttagta	taaaaataaa	ggtaaagcca	ataacataaa	180
ttggggcaaa	tacaaagatg	gctcttagca	aagtcaag			218

<210> 16
<211> 35
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer; BglII site, RSV B 9320 G

<400> 16

gatatcaaga tctacaataa cattggggca aatgc 35

<210> 17
<211> 31
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer; BglII site, RSV B 9320 G

<400> 17
gctaagagat ctttttgaat aactaagcat g 31

<210> 18
<211> 36
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer; BamHI site, RSV B 9320

<400> 18
atcaggatcc acaataacat tggggcaaat gcaacc 36

<210> 19
<211> 36
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer; BamHI site, RSV 9320 G

<400> 19
ctggcattcg gatccgtttt atgtaactat gagttg 36

<210> 20
<211> 27
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer

<400> 20
gatcccatgg ctcttagcaa agtcaag 27

<210> 21
<211> 31
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer

<400> 21

gtacggatcc gttgacttat ttgccccgta t 31

<210> 22
<211> 25
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer

<400> 22
gatcccatgg agaagtttgc acctg 25

<210> 23
<211> 28
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer

<400> 23
gtacggatcc tgagtgagtt gatcactg 28

<210> 24
<211> 28
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer

<400> 24
gcttggccat aacgattcta tatcatcc 28

<210> 25
<211> 26
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer

<400> 25
ggtagtataa tgttgtgcac ttttag 26

<210> 26
<211> 25
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer

<400> 26
ggtcacgatt tacaagataa gctcc 25

<210> 27
 <211> 30
 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide primer

 <400> 27
 cagatccttt taacttgcta cctaggcaca 30

<210> 28
 <211> 23
 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide primer

 <400> 28
 cttacgtgtg cctaggtagc aag 23

<210> 29
 <211> 33
 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide primer

 <400> 29
 acgagaaaaa aagtgtcaaa aactaatgtc tcg 33

<210> 30
 <211> 42
 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide primer

 <400> 30
 gtttttgaca ctttttttct cgtggccggc atgggccag cc 42

<210> 31
 <211> 33

 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide primer

 <400> 31

gatctagagc tccaagcttg cggccgcgtc gac 33

<210> 32
<211> 46
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer

<400> 32
gggtaccccc gggtaatacg actcactata gggacgggaa aaaatg 46

<210> 33
<211> 24
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer

<400> 33
gttaacttag agctctacat catc 24

<210> 34
<211> 24
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer

<400> 34
gtgtggtcct aggcaatgca gcag 24

<210> 35
<211> 29
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer

<400> 35
gacacagcat gatggtagag ctctatgtg 29

<210> 36
<211> 28
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer

<400> 36
gctaagtgaa cataaaacat tctgtaac 28

<210> 37
 <211> 26
 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide primer

 <400> 37
 ccattaataa tgggatccat tttgtc 26

<210> 38
 <211> 29
 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide primer

 <400> 38
 cacatagagc tctaccatca tgctgtgtc 29

<210> 39
 <211> 27
 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide primer

 <400> 39
 cattaatgag ggaccacag gcttttag 27

<210> 40
 <211> 27
 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide primer

 <400> 40
 ctaaagcctg tgggtccctc attaatg 27

<210> 41

 <211> 32
 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide primer

 <400> 41
 catggttaat aactgggttc aatttatata ca 32

<210> 42
 <211> 32
 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide primer

 <400> 42
 tgtatataaa ttgaaccagt gtattaacca tg 32

<210> 43
 <211> 41
 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide primer

 <400> 43
 gtcttaaaaa acgaaataaa acgctacaag ggcctcatat c 41

<210> 44
 <211> 41
 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide primer

 <400> 44
 ggtatgaggg ccttgtagcg ttttatttcg ttttttaaga c 41

<210> 45
 <211> 24
 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide primer

 <400> 45
 gatgatgtag agctttaagt taac 24

<210> 46
 <211> 24
 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide primer

 <400> 46
 gttaacttaa agctctacat catc 24

<210> 47
 <211> 44
 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide primer

 <400> 47
 ctaactggta aagaaagaga gcttagtgta ggtagaatgt ttgc 44

<210> 48
 <211> 44
 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide primer

 <400> 48
 gcaaacattc tacctacact aagctctctt tctttaccag ttag 44

<210> 49
 <211> 40
 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide primer

 <400> 49
 gtttaacaac caatgagctt aaaaagctga ttaaaattac 40

<210> 50
 <211> 40
 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide primer

 <400> 50
 gtaattttta tcagcttttt aagctcattg gttgttaaac 40

<210> 51
 <211> 23
 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide primer

 <400> 51
 cggctcaatg gatgataatt gtg 23

<210> 52
<211> 23
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer

<400> 52
atgaagctac tgcacaaagt agg

23

<210> 53
<211> 27
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer

<400> 53
gtaatcatct tttggttttt ttggtgg

27

<210> 54
<211> 33
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer

<400> 54
ccaaccatca aaccacaaaa caaaccaacc gtc

33

<210> 55
<211> 8
<212> DNA
<213> Respiratory syncytial virus

<220>
<223> fragments of genome RSV9320 cDNA

<400> 55
acggaaaa

8

<210> 56
<211> 8
<212> DNA
<213> Respiratory syncytial virus

<220>
<223> fragments of genome RSV9320 cDNA

<400> 56
acgcaaaa

8